Exhibit A

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

BLUE SPIKE, LLC,	§	
	§	
***Plaintiff*,**	§	**Civil Action No. 12-CV-499-MHS**
	§	
v.	§	**LEAD CASE**
	§	
TEXAS INSTRUMENTS, INC., *et al*.,	§	**JURY TRIAL DEMANDED**
	§	
***Defendants*.**	§	
	§	

PLAINTIFF'S DISCLOSURE OF ASSERTED CLAIMS AND INFRINGEMENT CONTENTIONS WITH ACCOMPANYING DOCUMENT PRODUCTION

Plaintiff, Blue Spike, LLC, hereby makes its Disclosure of Asserted Claims and Infringement Contentions and accompanying document production pursuant to the Rules of Practice for Patent Practice of the Eastern District of Texas, P.R. 3-1 and 3-2.

Pursuant to P.R. 3-1, Plaintiff Blue Spike, LLC ("Plaintiff") hereby submits these Infringement Contentions to Defendant.

LOCAL PATENT RULE 3-1

Plaintiff has endeavored to prepare contentions that are as accurate as possible based on publicly available information and Plaintiff's information and belief. Plaintiff expressly reserves the right to supplement or amend these contentions and accused products as additional information regarding the accused products, such as the source code for the accused products and technical documents, are obtained from Defendant in the course of discovery. This disclosure is made solely for the purpose of this action. This disclosure is subject to all objections as to competence, relevance, materiality, propriety, and admissibility, and to any other applicable objections.

A. *P.R. 3-1(a): Each claim of each patent in suit that is allegedly infringed by each opposing party;*

See Exhibit A. Plaintiff believes that discovery, including inspection of the Defendant's source code and other technical documents relating to its products, services, and systems may reveal additional information supporting these contentions. Plaintiff therefore reserves the right to amend or supplement these disclosures.

B. *P.R. 3-1(b): Separately for each asserted claim, each accused apparatus, product, device, process, method, act, or other instrumentality ("Accused Instrumentality") of each opposing party of which the party is aware. This identification shall be as specific as possible. Each product, device, and apparatus must be identified by name or model number, if known. Each method or process must be identified by name, if known, or by any product, device, or apparatus which, when used, allegedly results in the practice of the claimed method or process;*

See Exhibit A. Plaintiff believes that discovery, including inspection of the Defendant's source code and other technical documents relating to its products, services, and systems may reveal additional products that infringe the asserted patent. In such case, Plaintiff therefore reserves the right to amend or supplement these disclosures.

C. *P.R. 3-1(c): A chart identifying specifically where each element of each asserted claim is found within each Accused Instrumentality, including for each element that such party contends is governed by 35 U.S.C. c 112(6), the identity of the structure(s), act(s), or material(s) in the Accused Instrumentality that performs the claimed function;*

See Exhibit A. Plaintiff believes that discovery, including inspection of the Defendant's source code and other technical documents relating to its products, services, and systems may reveal additional information supporting these contentions. Plaintiff therefore reserves the right to amend or supplement these disclosures.

D. *P.R. 3-1(d): Whether each element of each asserted claim is claimed to be literally present or present under the doctrine of equivalents in the Accused Instrumentality;*

See Exhibit A. Plaintiff believes that discovery, including inspection of the Defendant's source code and other technical documents relating to its products, services, and systems may reveal additional information supporting these contentions. Plaintiff therefore reserves the right to amend or supplement these disclosures.

E. *P.R. 3-1(e): For any patent that claims priority to an earlier application, the priority date to which each asserted claim allegedly is entitled; and*

See Exhibit A. Plaintiff asserts that each asserted claim of the patents-in-suit are entitled to a priority date no later than September 7, 2000.

F. *P.R. 3-1(f): If a party claiming patent infringement wishes to preserve the right to rely, for any purpose, on the assertion that its own apparatus, product, device, process, method, act, or other instrumentality practices the claimed invention, the party must identify, separately for each asserted claim, each such apparatus, product, device, process, method, act, or other instrumentality that incorporates or reflects that particular claim.*

Not Applicable.

LOCAL PATENT RULE 3-2

Plaintiff has produced the following documents to Defendant via counsel for Plaintiff's FTP site on February 26, 2014 per the Court's order.

A. *P.R. 3-2(a): Documents (e.g., contracts, purchase orders, invoices, advertisements, marketing materials, offer letters, beta site testing agreements, and third party or joint development agreements) sufficient to evidence each discussion with, disclosure to, or other manner of providing to a third party, or sale of or offer to sell, the claimed invention prior to the date of application for the patent in suit. A party's production of a document as required herein shall not constitute an admission that such document evidences or is prior art under 35 U.S.C. c 102;*

See Chart Below.

B. *P.R. 3-2(b): All documents evidencing the conception, reduction to practice, design, and development of each claimed invention, which were created on or before the date of application for the patent in suit or the priority date identified pursuant to P. R. 3-1(e), whichever is earlier; and*

See Chart Below.

C. *P.R. 3-2(c): A copy of the file history for each patent in suit.*

See Chart Below.

Local Patent Rule	Bates Range Location
3-2(a)	After a reasonable investigation, Plaintiff is not aware of any responsive documents at this time.
3-2(b)	After a reasonable investigation, Plaintiff is not aware of any responsive documents at this time.
3-2(c)	BLU000001-BLU002260

Respectfully submitted,

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Counsel for Blue Spike, LLC

Exhibit A

Clear Channel Broadcasting's Media Monitors and RCS monitoring and verification software, systems, and technology

Each element of each asserted claim is present in the accused instrumentalities listed above either literally, or alternatively, under the doctrine of equivalents.

Blue Spike – Monitoring and Analyzing Signals – U.S. Patent 8,214,175

Preliminary Infringement Claim Chart

Claim	**Clear Channel Broadcasting's Media Monitors and RCS monitoring and verification software, systems, and technology**
1. A system, comprising: non transitory memory comprising a database for storing a plurality of digital reference signal abstracts;	Media Monitors' media monitoring service (the "Media Monitors Service") is a system that uses a database, having computer memory ("non-transitory memory"), to store fingerprints of commercial spot content ("plurality of digital reference signal abstracts"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).

at least one processor; wherein said at least one processor is programmed or structured to generate a digital reference signal abstract from a digital reference signal such that said digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal; and	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "at least one processor") that generates a fingerprint ("digital reference signal abstract") from the content. On information and belief, the abstract is similar to the digital reference signal itself and reduced in size compared to it. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our **computers** automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the

	United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
wherein said at least one processor is programmed to store said digital reference signal abstract in said database as one of said plurality of digital reference signal abstracts;	The processor is programmed to store the reference fingerprint ("digital reference signal abstract") in the database. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
wherein said non transitory memory further comprises a	On information and belief, the non-transitory memory further comprises a second database for storing a plurality of second database digital reference signal abstracts. Further discovery will be needed to identify the infringing

second database for storing a plurality of second database digital reference signal abstracts;	instrumentality.
wherein said at least one processor is programmed or structured to generate a second database digital reference signal abstract from said digital reference signal such that said second database digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal, and wherein said second database digital reference signal abstract is distinct from said digital reference signal abstract; and	On information and belief, the processor is programmed or structured to generate a second database digital reference signal abstract from said digital reference signal such that said second database digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal, and wherein said second database digital reference signal abstract is distinct from said digital reference signal abstract. Further discovery will be needed to identify the infringing instrumentality.
wherein said at least one processor is programmed to store said second database digital reference signal abstract in said second database as one of said plurality of second database digital reference signal abstracts.	On information and belief, the processor is programmed to store said second database digital reference signal abstract in said second database as one of said plurality of second database digital reference signal abstracts. Further discovery will be needed to identify the infringing instrumentality.
2. The system of claim 1, wherein said at least one processor is programmed or structured to generate said digital reference signal abstract from said digital reference signal by	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, generates its abstracts using perceptual qualities of said digital reference signal such that the abstract retains a perceptual relationship to said digital reference signal. Further discovery will be needed to chart the infringing instrumentality.

using perceptual qualities of said digital reference signal in generating said digital reference signal abstract such that the abstract retains a perceptual relationship to said digital reference signal.	
3. The system of claim 1 wherein said at least one processor is programmed or structured to generate a digital reference signal abstract from a digital reference signal such that said digital reference signal abstract is self similar to said digital reference signal.	As established above, the Media Monitors Service infringes Claim 1, and on information and belief, the abstracts are self-similar to the content ("digital reference signals"). Further discovery will be needed to chart the infringing instrumentality.
4. The system of claim 1, wherein said at least one processor is programmed or structured to select criteria to use for generating said digital reference signal abstract from said digital reference signal.	As established above, the Media Monitors Service infringes Claim 1, and on information and belief, the processor is programmed or structured to select criteria to use for generating the abstracts from the digital reference signals. Further discovery will be needed to chart the infringing instrumentality.
5. The system of claim 1, wherein said at least one processor is programmed or structured to generate said digital query signal abstract from a digital query signal such that said digital query signal abstract is similar to said digital query	As established above, the Media Monitors Service infringes Claim 1, and on information and belief, the query signal abstracts are similar to the digital query signals and reduced in size compared to them. Further discovery will be needed to chart the infringing instrumentality.

signal and reduced in size compared to said digital query signal.	
6. The system of claim 1, wherein said at least one processor is programmed to generate said digital reference signal abstract.	As established above, the Media Monitors Service infringes Claim 1, and on information and belief, the processor is programmed to generate the digital reference signal abstracts. Further discovery will be needed to chart the infringing instrumentality.
7. A system, comprising: non transitory memory comprising a database for storing a plurality of digital reference signal abstracts;	Media Monitors' media monitoring service (the "Media Monitors Service") is a system that uses a database, having computer memory ("non-transitory memory"), to store fingerprints of commercial spot content ("plurality of digital reference signal abstracts"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display**

	advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
at least one processor; wherein said at least one processor is programmed or structured to generate a digital reference signal abstract from a digital reference signal such that said digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal; and	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "at least one processor") that generates a fingerprint ("digital reference signal abstract") from the content. On information and belief, the abstract is similar to the digital reference signal itself and reduced in size compared to it. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our **computers** automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and**

	Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
wherein said at least one processor is programmed to store said digital reference signal abstract in said database as one of said plurality of digital reference signal abstracts;	The processor is programmed to store the reference fingerprint ("digital reference signal abstract") in the database. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).

wherein said at least one processor is programmed or structured to generate said digital reference signal abstract from said digital reference signal and at least one of a hash and a signature, so that each one of said plurality of digital reference signal abstracts in said database is distinct from one another.	On information and belief, the processor is programmed or structured to generate said digital reference signal abstract from said digital reference signal and at least one of a hash and a signature, so that each one of said plurality of digital reference signal abstracts in said database is distinct from one another. Further discovery will be needed to identify the infringing instrumentality.
8. A system, comprising: non transitory memory comprising a database for storing a plurality of digital reference signal abstracts;.	Media Monitors' media monitoring service (the "Media Monitors Service") is a system that uses a database, having computer memory ("non-transitory memory"), to store fingerprints of commercial spot content ("plurality of digital reference signal abstracts"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors

	the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
at least one processor;. wherein said at least one processor is programmed or structured to generate a digital reference signal abstract from a digital reference signal such that said digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal; and.	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "at least one processor") that generates a fingerprint ("digital reference signal abstract") from the content. On information and belief, the abstract is similar to the digital reference signal itself and reduced in size compared to it. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our **computers** automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).

	RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
wherein said at least one processor is programmed to store said digital reference signal abstract in said database as one of said plurality of digital reference signal abstracts;	The processor is programmed to store the reference fingerprint ("digital reference signal abstract") in the database. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.**

	See Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
wherein said digital reference signal is a digital representation of one of a plurality of different versions of a visual work and a multimedia work, and wherein said at least one processor is programmed or structured to generate said digital reference signal abstract from said digital reference signal so that said digital reference signal comprises signal characteristic parameters that differentiate between said plurality of different versions of said visual work and said multimedia work.	On information and belief, the digital reference signal is a digital representation of one of a plurality of different versions of a visual work and a multimedia work, and wherein said at least one processor is programmed or structured to generate said digital reference signal abstract from said digital reference signal so that said digital reference signal comprises signal characteristic parameters that differentiate between said plurality of different versions of said visual work and said multimedia work. Further discovery will be needed to identify the infringing instrumentality.
9. A system, comprising: non transitory memory comprising a database for storing a plurality of digital reference signal abstracts;	Media Monitors' media monitoring service (the "Media Monitors Service") is a system that uses a database, having computer memory ("non-transitory memory"), to store fingerprints of commercial spot content ("plurality of digital reference signal abstracts"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below:

	Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
at least one processor; wherein said at least one processor is programmed or structured to generate a digital reference signal abstract from a digital reference signal such that said digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal; and	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "at least one processor") that generates a fingerprint ("digital reference signal abstract") from the content. On information and belief, the abstract is similar to the digital reference signal itself and reduced in size compared to it. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our **computers** automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface.

	See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
wherein said at least one processor is programmed to store said digital reference signal abstract in said database as one of said plurality of digital reference signal abstracts;	The Media Monitors Service stores the reference fingerprint ("digital reference signal abstract") in the database. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the**

	creative files, and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
wherein said at least one processor is programmed or structured to determine if said digital reference signal abstract matches one of said plurality of digital reference signal abstracts stored in said database; and	On information and belief, the processor is programmed or structured to determine if said digital reference signal abstract matches one of said plurality of digital reference signal abstracts stored in said database. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and**

	Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
wherein said processor is programmed to recalibrate said database in response to a determination that said digital reference signal abstract matches one of said plurality of digital reference signal abstracts stored in said database.	On information and belief, the processor is programmed to recalibrate said database in response to a determination that said digital reference signal abstract matches one of said plurality of digital reference signal abstracts stored in said database. Further discovery will be needed to identify the infringing instrumentality.
10. A system, comprising: non transitory memory comprising a database for storing a plurality of digital reference signal abstracts;	Media Monitors' media monitoring service (the "Media Monitors Service") is a system that uses a database, having computer memory ("non-transitory memory"), to store fingerprints of commercial spot content ("plurality of digital reference signal abstracts"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program**

	output. These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
at least one processor; wherein said at least one processor is programmed or structured to generate a digital reference signal abstract from a digital reference signal such that said digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal; and	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "at least one processor") that generates a fingerprint ("digital reference signal abstract") from the content. On information and belief, the abstract is similar to the digital reference signal itself and reduced in size compared to it. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our **computers** automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. …

	How are new advertisements identified? Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
wherein said at least one processor is programmed to store said digital reference signal abstract in said database as one of said plurality of digital reference signal abstracts;	The processor is programmed to store the reference fingerprint ("digital reference signal abstract") in the database. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface.

	See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
wherein said processor is programmed or structured to change selected criteria to use for generating said digital reference signal abstract from said digital reference signal when said at least one processor determines that said digital reference signal abstract matches one of said plurality of digital reference signal abstracts stored in said database.	On information and belief, the processor is programmed or structured to change selected criteria to use for generating said digital reference signal abstract from said digital reference signal when said at least one processor determines that said digital reference signal abstract matches one of said plurality of digital reference signal abstracts stored in said database. Further discovery will be needed to identify the infringing instrumentality.
11. A system, comprising: non transitory memory comprising a database for storing a plurality of digital reference	Media Monitors' media monitoring service (the "Media Monitors Service") is a system that uses a database, having computer memory ("non-transitory memory"), to store fingerprints of commercial content ("plurality of digital reference signal abstracts"). **How are new advertisements identified?**

signal abstracts;	Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
at least one processor; wherein said at least one processor is programmed or structured to generate a digital reference signal abstract from a digital reference signal such that said digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal; and	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "at least one processor") that generates a fingerprint ("digital reference signal abstract") from the content. On information and belief, the abstract is similar to the digital reference signal itself and reduced in size compared to it. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our **computers** automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.

	… **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
wherein said at least one processor is programmed to store said digital reference signal abstract in said database as one of said plurality of digital reference signal abstracts;	The processor is programmed to store the reference fingerprint ("digital reference signal abstract") in the database. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can

	easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
wherein said at least one processor is programmed or structured to compare a digital query signal abstract to said plurality of digital reference signal abstracts stored in said database to generate a compare result.	On information and belief, the processor is programmed or structured to compare a digital query signal abstract to said plurality of digital reference signal abstracts stored in said database to generate a compare result. Further discovery will be needed to identify the infringing instrumentality, but the following indicates infringement: The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days.

	See Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
12. The system of claim 11, wherein said compare result indicates no match between said digital query signal abstract to said plurality of digital reference signal abstracts stored in said database.	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, the compare result could indicate no match between the digital query signal abstract to the plurality of digital reference signal abstracts stored in the database. Further discovery will be needed to chart the infringing instrumentality.

13. The system of claim 11, wherein said compare result indicates a match between said digital query signal abstract and a first digital reference signal abstracts of said plurality of digital reference signal abstracts stored in said database.	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, the compare result could indicate a match between the digital query signal abstract to the plurality of digital reference signal abstracts stored in the database. Further discovery will be needed to chart the infringing instrumentality.
14. The system of claim 11, wherein said memory further defines a digital query signal abstract receipt recorder recording a number times said at least one processor receives said digital query signal abstract for comparison with said plurality of digital reference signal abstracts stored in said database.	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, the memory further defines a digital query signal abstract receipt recorder recording the number times said at least one processor receives said digital query signal abstract for comparison with said plurality of digital reference signal abstracts stored in said database. Further discovery will be needed to chart the infringing instrumentality.
15. The system of claim 11, wherein said memory further defines a first digital reference signal abstract match recorder recording a number of times said at least one processor determines a match between a digital query signal abstract and first digital reference signal abstract of said plurality of digital reference signal abstracts stored in said database.	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, the memory further defines a first digital reference signal abstract match recorder recording a number of times said at least one processor determines a match between a digital query signal abstract and first digital reference signal abstract of said plurality of digital reference signal abstracts stored in said database. Further discovery will be needed to chart the infringing instrumentality.
16. The system of claim 12,	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, the at least one

wherein said at least one processor is programmed or structured to use an algorithm to generate said digital reference signal abstract from said digital reference signal; and wherein said at least one processor is programmed or structured to use said algorithm to generate said digital query signal abstract from said digital query signal.	processor is programmed or structured to use an algorithm to generate said digital reference signal abstract from said digital reference signal; and wherein said at least one processor is programmed or structured to use said algorithm to generate said digital query signal abstract from said digital query signal. Further discovery will be needed to chart the infringing instrumentality.
17. A system, comprising: non transitory memory comprising a database for storing a plurality of digital reference signal abstracts;	Media Monitors' media monitoring service (the "Media Monitors Service") is a system that uses a database, having computer memory ("non-transitory memory"), to store fingerprints of commercial spot content ("plurality of digital reference signal abstracts"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.**

	Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
at least one processor; wherein said at least one processor is programmed or structured to generate a digital reference signal abstract from a digital reference signal such that said digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal; and	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "at least one processor") that generates a fingerprint ("digital reference signal abstract") from the content. On information and belief, the abstract is similar to the digital reference signal itself and reduced in size compared to it. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our **computers** automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."**

	See Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
wherein said at least one processor is programmed to store said digital reference signal abstract in said database as one of said plurality of digital reference signal abstracts;	The processor is programmed to store the reference fingerprint ("digital reference signal abstract") in the database. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display**

	advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
wherein said wherein said [*sic*] at least one processor is programmed or structured to apply at least one of psycho-acoustic model and a psycho-visual model to generate said digital reference signal abstract from said digital reference signal.	On information and belief, the processor is programmed or structured to apply at least one of psycho-acoustic model and a psycho-visual model to generate said digital reference signal abstract from said digital reference signal. Further discovery will be needed to identify the infringing instrumentality.
18. A method, comprising: storing in non transitory memory a database for storing a plurality of digital reference signal abstracts;	Media Monitors' media monitoring service (the "Media Monitors Service") is a method that uses a database, having computer memory ("non-transitory memory"), to store fingerprints of commercial spot content ("digital reference signal abstracts"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our**

	existing database library and identify new advertisements. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
generating with at least one processor a digital reference signal abstract from a digital reference signal such that said digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal; and.	The Media Monitors Services uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "at least one processor") that generates a fingerprint ("digital reference signal abstract") from the content. On information and belief, the digital reference signal abstract is similar to the digital reference signal itself and reduced in size compared to it. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our **computers** automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for**

	accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
storing with said at least one processor said digital reference signal abstract in said database as one of said plurality of digital reference signal abstracts;	The processor is programmed to store the reference fingerprint ("digital reference signal abstract") in the database. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors

	the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
wherein said non transitory memory further comprises a second database for storing a plurality of second database digital reference signal abstracts;.	On information and belief, the non-transitory memory further comprises a second database for storing a plurality of second database digital reference signal abstracts. Further discovery will be needed to identify the infringing instrumentality.
wherein said at least one processor is programmed or structured to generate a second database digital reference signal abstract from said digital reference signal such that said second database digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal, and wherein said second database digital reference signal abstract is distinct from said digital reference signal abstract; and	On information and belief, the processor is programmed or structured to generate a second database digital reference signal abstract from said digital reference signal such that said second database digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal, and wherein said second database digital reference signal abstract is distinct from said digital reference signal abstract. Further discovery will be needed to identify the infringing instrumentality.
wherein said at least one processor is programmed to store said second database digital reference signal abstract in said second database as one of said plurality of second database	On information and belief, the processor is programmed to store said second database digital reference signal abstract in said second database as one of said plurality of second database digital reference signal abstracts. Further discovery will be needed to identify the infringing instrumentality.

digital reference signal abstracts.	
19. A computer program product stored on non transitory memory media, which, when installed on a computer system having at least one processor and non transitory memory, causes said computer system to perform the steps comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") uses a fingerprinting algorithm (a "computer program") to perform the steps of Claim 19. It is obvious to one skilled in the art that a computer program be run on a processor and non-transitory memory ("at least one processor and non transitory memory"). **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our **computers** automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of

	each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
storing in said non transitory memory a database for storing a plurality of digital reference signal abstracts;	The Media Monitors Service uses a database, having computer memory ("non-transitory memory"), to store the fingerprints of content ("plurality of digital reference signal abstracts"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
generating with said at least one processor a digital reference signal abstract from a digital	The Media Monitors Service uses the processor to generate a fingerprint ("digital reference signal abstract") from the content. On information and belief, the abstract is similar to the digital reference signal itself and reduced in size compared to it. Further discovery will be required to chart the infringing instrumentality, but the following indicates

reference signal such that said digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal; and	infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our **computers** automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis

	added).
storing with said at least one processor said digital reference signal abstract in said database as one of said plurality of digital reference signal abstracts;.	The processor in the Media Monitors Service stores the reference fingerprint ("digital reference signal abstract") in the database. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
wherein said non transitory memory further comprises a second database for storing a plurality of second database digital reference signal abstracts;	On information and belief, said non transitory memory further comprises a second database for storing a plurality of second database digital reference signal abstracts. Further discovery will be needed to identify the infringing instrumentality.

wherein said at least one processor is programmed or structured to generate a second database digital reference signal abstract from said digital reference signal such that said second database digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal, and wherein said second database digital reference signal abstract is distinct from said digital reference signal abstract; and.	On information and belief, said at least one processor is programmed or structured to generate a second database digital reference signal abstract from said digital reference signal such that said second database digital reference signal abstract is similar to said digital reference signal and reduced in size compared to said digital reference signal, and wherein said second database digital reference signal abstract is distinct from said digital reference signal abstract. Further discovery will be needed to identify the infringing instrumentality.
wherein said at least one processor is programmed to store said second database digital reference signal abstract in said second database as one of said plurality of second database digital reference signal abstracts.	On information and belief, said at least one processor is programmed to store said second database digital reference signal abstract in said second database as one of said plurality of second database digital reference signal abstracts. Further discovery will be needed to identify the infringing instrumentality.

Blue Spike – Monitoring and Analyzing Signals – U.S. Patent 7,346,472

Preliminary Infringement Claim Chart

Claim	**Clear Channel Broadcasting's Media Monitors and RCS monitoring and verification software, systems, and technology**
1. A method for monitoring and analyzing at least one signal comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a method for monitoring and identifying ("monitoring and analyzing") commercial spot content and other media ("at least one signal"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio

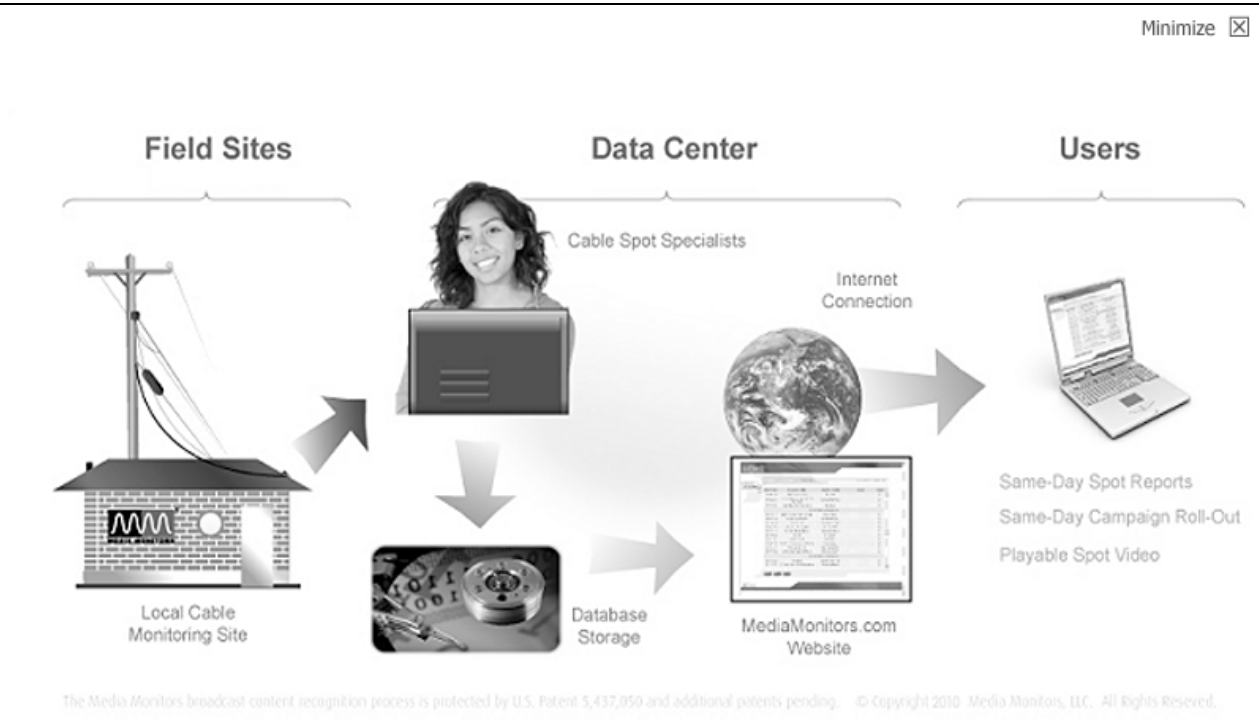
	and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
receiving at least one reference signal to be monitored;	The Media Monitors Service collects ("receives") commercial spots ("at least one reference signal") to be monitored. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date. Step 3: Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). How are new advertisements identified? Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our

	patented method of fingerprinting technology is then used to **identify spots, and program output**. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. …. How does Media Monitors know what was played or what ran? Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. **Our computers automatically track millions** of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added)
creating an abstract of said at least one reference signal wherein the step of creating an abstract of said at least one reference signal comprises: inputting the reference signal to a processor; [and] creating an abstract of the reference signal using perceptual qualities of the reference signal such that the abstract retains a perceptual relationship to the reference signal from which it is derived;	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "a processor") that generates a fingerprint ("creates an abstract") from the advertising it is monitoring ("reference signal[s]"). On information and belief, the abstract is created using perceptual qualities of the reference signal such that the abstract retains a perceptual relationship to the reference signals from which it is derived. Further discovery will be required to identify the infringing instrumentality, but the following indicates infringement: **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for**

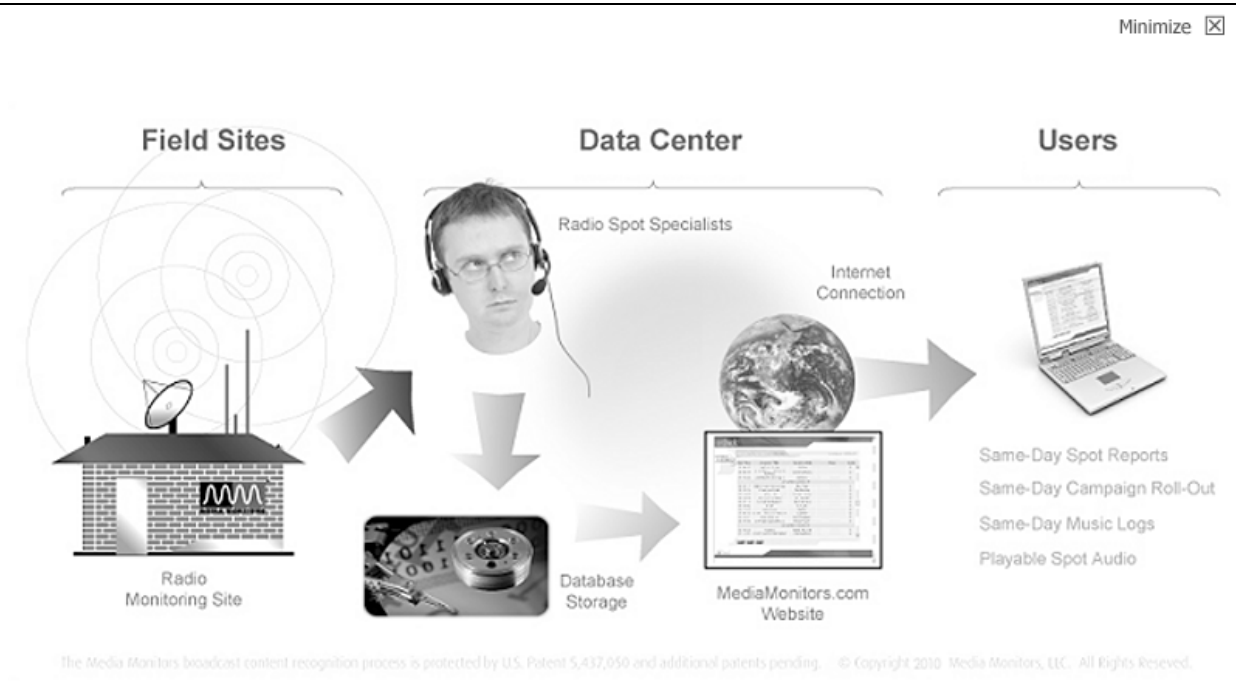
	accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The s**oftware continually crawls each web property each day.** Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
storing the abstract of said at least one reference signal in a reference database;	The Media Monitors Service uses a database ("a reference database") for storing fingerprints ("abstract[s]") of commercial content ("reference signal[s]"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program**

	output. These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
receiving at least one query signal to be analyzed;	The Media Monitors Service receives unknown commercial spots ("query signal[s]") to be analyzed. **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. … How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated**

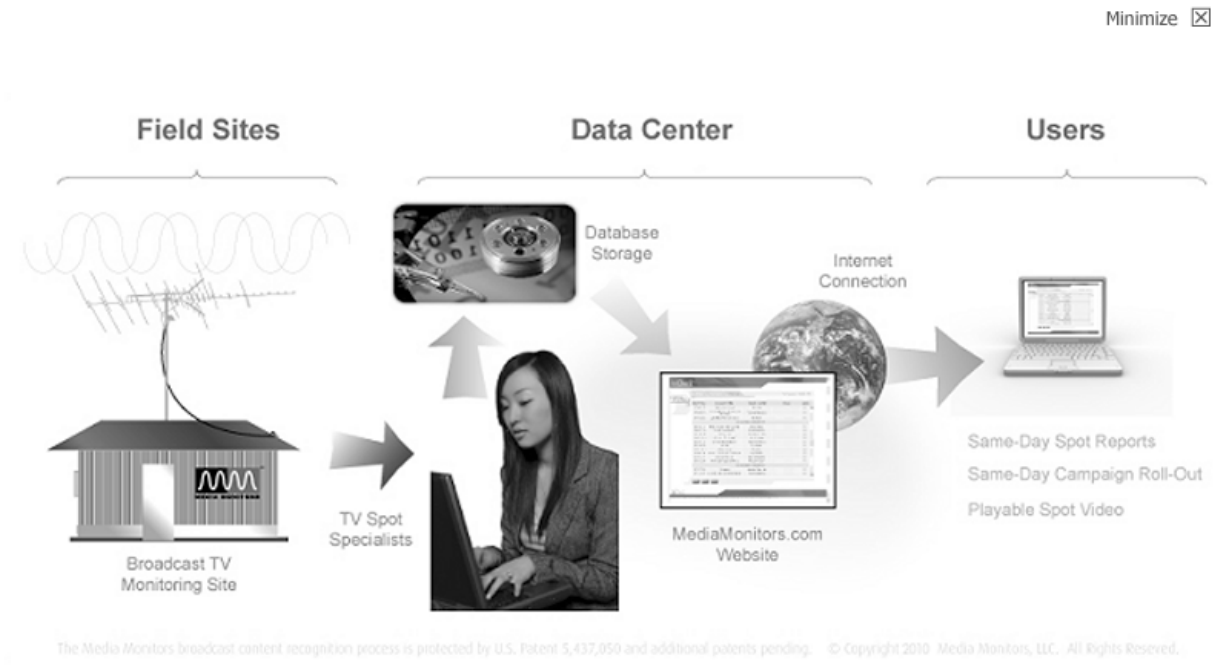
	networks in major markets across the country. Our computer automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually **crawls each web property each day**. Step 2: A proprietary program **finds display advertising from each website**, downloads the creative files, and captures specific data such as the URL, time, and date. Step 3: Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements. Step 4: The previous day's **newly observed data** for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).



See Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
creating an abstract of said at least one query signal wherein the step of creating an abstract of said at least one query signal comprises: inputting the at least one query signal to the processor; creating an abstract of the at least one query signal using perceptual qualities of the at least one query	The Media Monitors Service inputs the unknown commercial ("at least one query signal") to the processor, which generates a fingerprint ("create[s] an abstract") from it. On information and belief, the abstract is created using perceptual qualities of the query signal such that the abstract retains a perceptual relationship to the query signal from which it is derived. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research

signal such that the abstract retains a perceptual relationship to the at least one query signal from which it is derived; and	and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
comparing the abstract of said at least one query signal to the abstract of said at least one reference signal to determine if the abstract of said at least one query signal matches the abstract of said at least one reference signal.	The Media Monitors Service compares the fingerprint created from the unknown commercial ("abstract of said at least one query signal") to the fingerprints in the reference database ("abstract[s] of said at least one reference signal") to determine if there is a match. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."**

	See Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added)..
2. The method of claim 1, wherein the step of creating an abstract of said at least one reference signal comprises: using a portion of said at least one reference signal to create an abstract of said at least one reference signal; and the step of creating an abstract of said at least one query signal comprises:	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, can create the reference signal abstracts and query signal abstracts using only a portion of each. Further discovery will be required to chart the infringing instrumentality.

using a portion of said at least one query signal to create an abstract of said at least one query signal.	
3. A method for monitoring and analyzing at least one signal comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a method for monitoring and identifying ("monitoring and analyzing") commercial spots and musical content ("at least one signal"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis

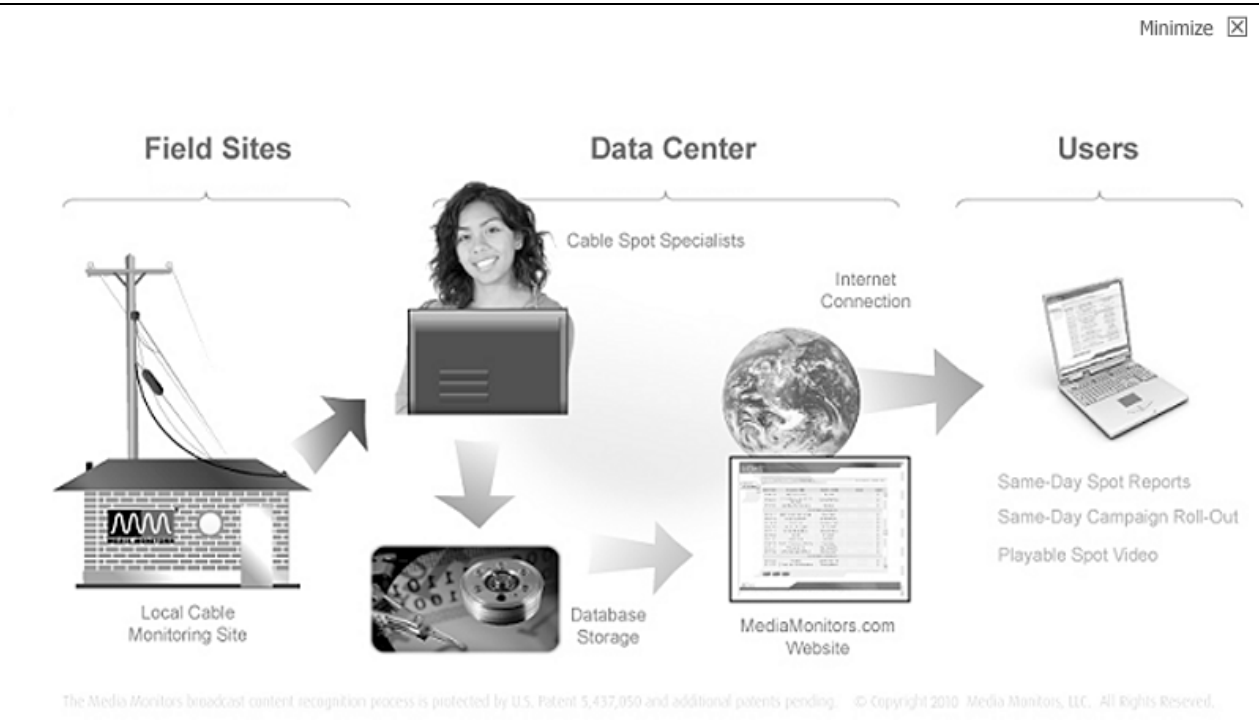
	added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
receiving at least one reference signal to be monitored;	The Media Monitors Service receives commercial spots ("at least one reference signal") to be monitored. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date. Step 3: Automated processes are run on a nightly basis to **match each creative observation to our existing database library** and identify new advertisements. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). How are new advertisements identified? Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to **identify spots, and program output**. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the **existing online database** where users can easily

	search and access data, sort and examine it using a simple Web interface. …. How does Media Monitors know what was played or what ran? Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. **Our computers automatically track millions** of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
creating an abstract of said at least one reference signal;	The Media Monitors Service generates a fingerprint ("creat[es] an abstract") from the content it is monitoring ("reference signal[s]"). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The s**oftware continually crawls each web property each day.**

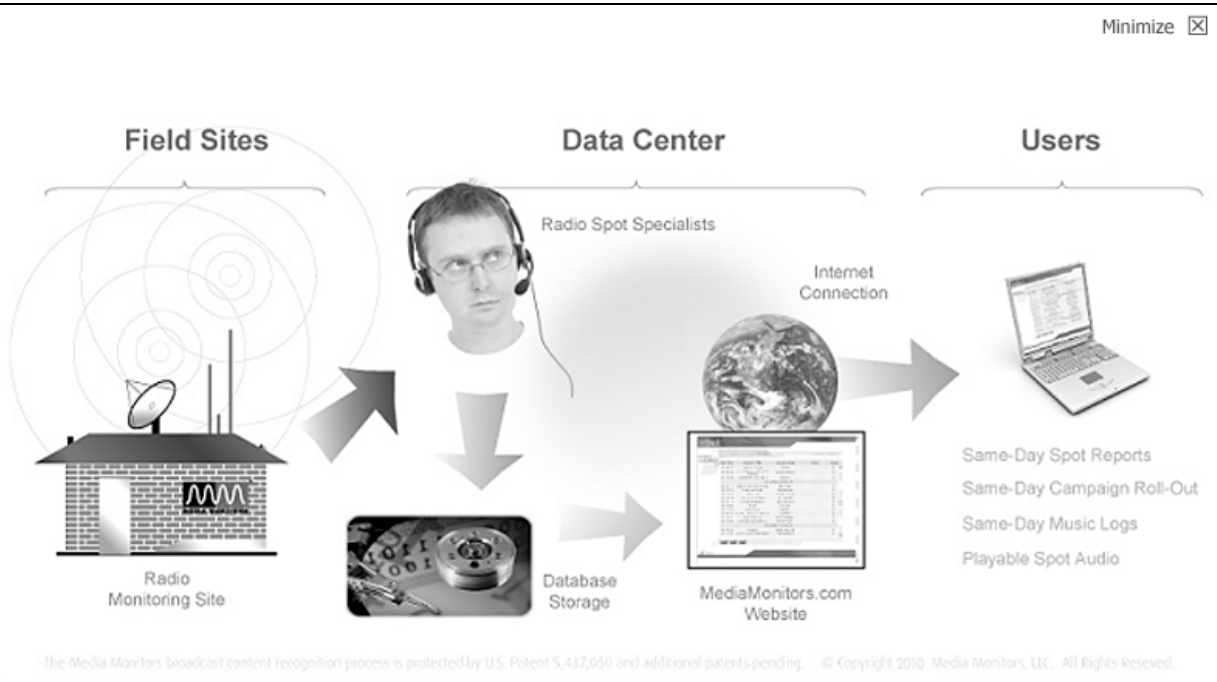
	Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
storing the abstract of said at least one reference signal in a reference database;	The Media Monitors Service uses a database ("a reference database") for storing fingerprints ("abstract[s]") of the commercial content ("reference signal[s]"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below:

	Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
receiving at least one query signal to be analyzed;	The Media Monitors Service receives unknown commercial spots ("query signal[s]") to be identified ("analyzed"). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. … How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computer automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.** *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below:

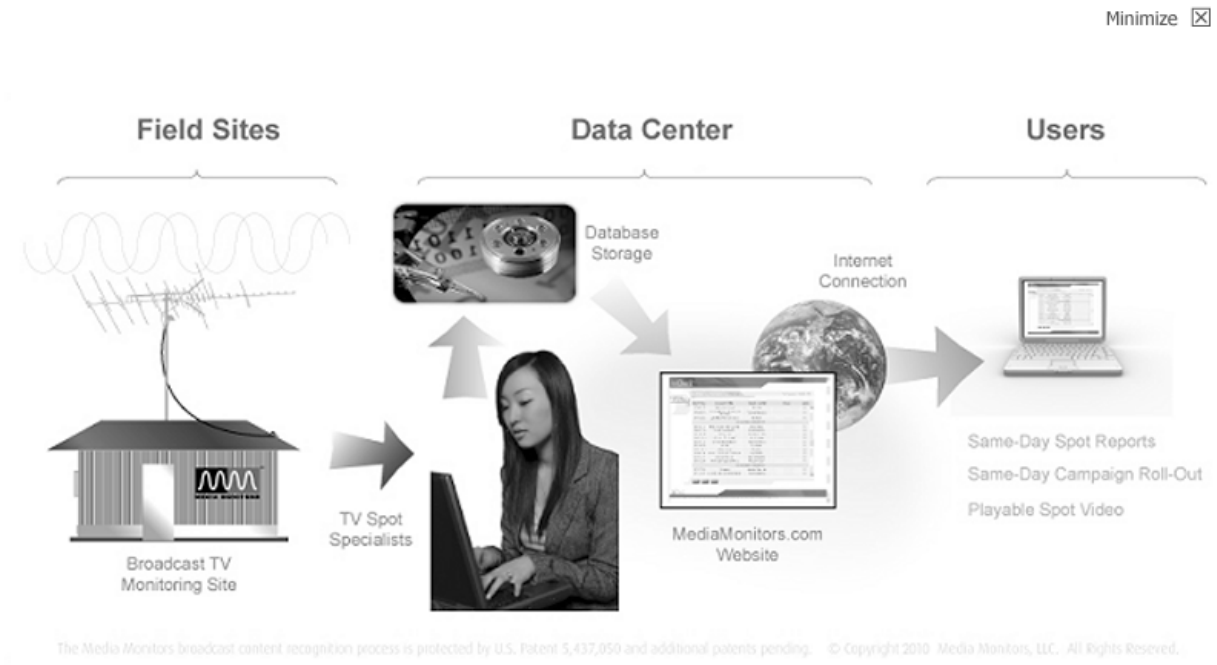
	Step 1: The software continually **crawls each web property each day**. Step 2: A proprietary program **finds display advertising from each website**, downloads the creative files, and captures specific data such as the URL, time, and date. Step 3: Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements. Step 4: The previous day's **newly observed data** for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).



See Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
creating an abstract of said at least one query signal;.	The Media Monitors Service generates a fingerprint ("abstract") from each unknown commercial ("query signal"). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface.

	See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
comparing the abstract of said at least one query signal to the abstract of said at least one reference signal to determine if the abstract of said at least one query signal matches the abstract of said at least one reference signal;	The Media Monitors Service compares the fingerprints created from the unknown commercials ("abstract[s] of said at least one query signal") to the fingerprints in the reference database ("abstract[s] of said at least one reference signal") to determine if there is a match. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to **identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast**

	TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
creating at least one counter corresponding to one of said at least one reference signals, said at least one counter being representative of the number of times a match is found between the abstract of said at least one query signal and the abstract of said at least one reference signal; and	On information and belief, the method used by Media Monitors also includes creating at least one counter corresponding to one of said at least one reference signals, said at least one counter being representative of the number of times a match is found between the abstract of said at least one query signal and the abstract of said at least one reference signal. Further discovery will be needed to chart the infringing instrumentality, but the fact that Media Monitors can provide "reports," "competitive intelligence," "details on a particular advertisement or an entire campaign," or "play information," or "track[] the success" of songs or "create[] a record of when" spots were aired indicates infringement: **MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online **reports** anytime you want them, 24 hours a day. Media Monitors provides **competitive intelligence information** for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa.

	Using the patented technology of Media Monitors, Sales Executives can have **details on a particular advertisement or an entire campaign** at their fingertips in seconds. Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors**.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). How are new advertisements identified? Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. **Play information** is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and **tracks the success of each song** in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and **creates a record of when and where it was aired** for accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).

incrementing the counter corresponding to a particular reference signal when a match is found between an abstract of said at least one query signal and the abstract of the particular reference signal.	On information and belief, the method used by Media Monitors also increments the counter corresponding to a particular reference signal when a match is found between an abstract of said at least one query signal and the abstract of the particular reference signal. Further discovery will be needed to chart the infringing instrumentality, but the fact that Media Monitors can provide "reports," "competitive intelligence," "details on a particular advertisement or an entire campaign," or "play information," or "track[] the success" of songs or "create[] a record of when" spots were aired indicates infringement: **MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online **reports** anytime you want them, 24 hours a day. Media Monitors provides **competitive intelligence information** for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have **details on a particular advertisement or an entire campaign** at their fingertips in seconds. Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors**.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). How are new advertisements identified? Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. **Play information** is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).

	RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and **tracks the success of each song** in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and **creates a record of when and where it was aired** for accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
4. The method of claim 3 further comprising: recording an occurrence of a match between the abstract of said at least one query signal and the abstract of said at least one reference signal; and generating a report that identifies the reference signal whose abstract matched the abstract of said at least one query signal.	As established above, the Media Monitors Service infringes Claim 3, and, on information and belief, includes the functionality to record occurrences of a match between the query signal abstract and a reference signal abstract and to generate a report that identifies the reference signal that was matched. Further discovery will be needed to chart the infringing instrumentality, but the following indicates infringement: **MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online **reports** anytime you want them, 24 hours a day. Media Monitors provides **competitive intelligence information** for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have **details on a particular advertisement or an entire campaign** at their fingertips in seconds. Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website

	of Media Monitors**.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). How are new advertisements identified? Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. **Play information** is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
5. The method of claim 4, further comprising: recording an occurrence of a match between the abstract of said at least one query signal and the abstract of said at least one reference signal.	On information and belief, the Media Monitors Service infringes Claim 4, and further comprises recording an occurrence of a match between the abstract of said at least one query signal and the abstract of said at least one reference signal. Further discovery will be needed to chart the infringing instrumentality, but the following indicates infringement: **MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online **reports** anytime you want them, 24 hours a day. Media Monitors provides **competitive intelligence information** for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have **details on a particular advertisement or an entire campaign** at their fingertips in seconds. Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors**.**

	See Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). How are new advertisements identified? Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. **Play information** is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
6. A method for monitoring a plurality of reference signals, comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a method for monitoring and identifying ("monitoring") commercial spots and musical content ("a plurality of reference signals"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added).

	Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
creating an abstract for each of the plurality of reference signals wherein the step of creating an abstract for each of a plurality of reference signals comprises: inputting each of the plurality of reference signals to a processor; creating an abstract of each one of the plurality of reference signals using perceptual qualities of each one of a plurality of reference signals such that the abstract	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "a processor," to which the reference signal is input) that generates a fingerprint ("creates an abstract") from the commercials it is monitoring ("plurality of reference signals"). On information and belief, the abstract is created using perceptual qualities of the reference signal such that the abstract retains a perceptual relationship to the reference signal from which it is derived. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database**

retains a perceptual relationship to the reference signal from which it is derived;	where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The s**oftware continually crawls each web property each day.** Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).

storing each of said abstracts in a reference database;	The Media Monitors Service uses a database ("a reference database") for storing the fingerprints ("abstracts") of the commercial content. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
receiving at least one query signal to be analyzed;	The Media Monitors Service receives unknown commercial spots ("query signal[s]") to be identified ("analyzed"). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where

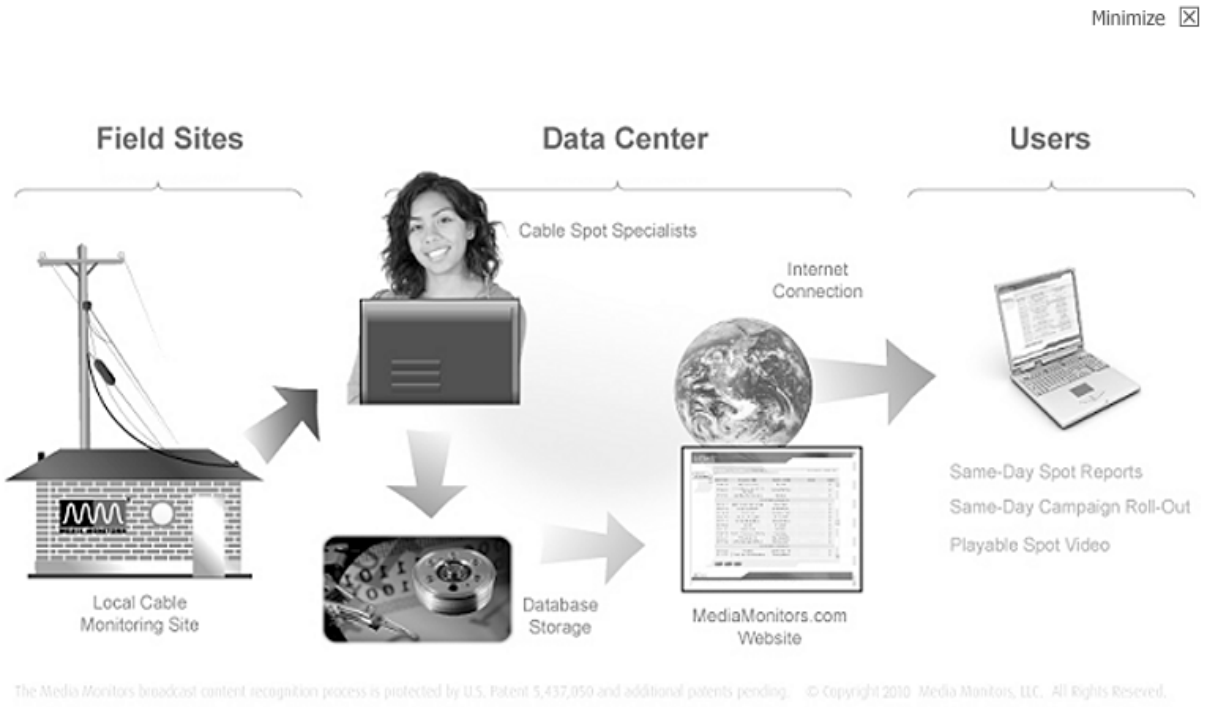
users can easily search and access data, sort and examine it using a simple Web interface.

…

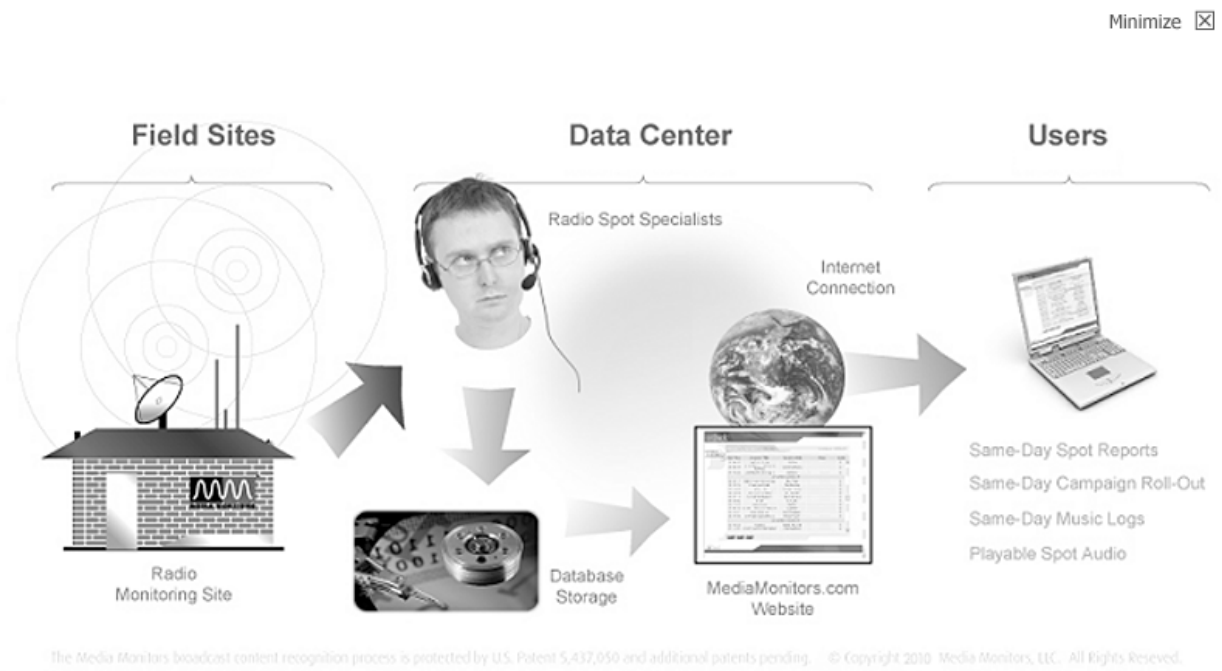
How does Media Monitors know what was played or what ran?

Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computer automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.

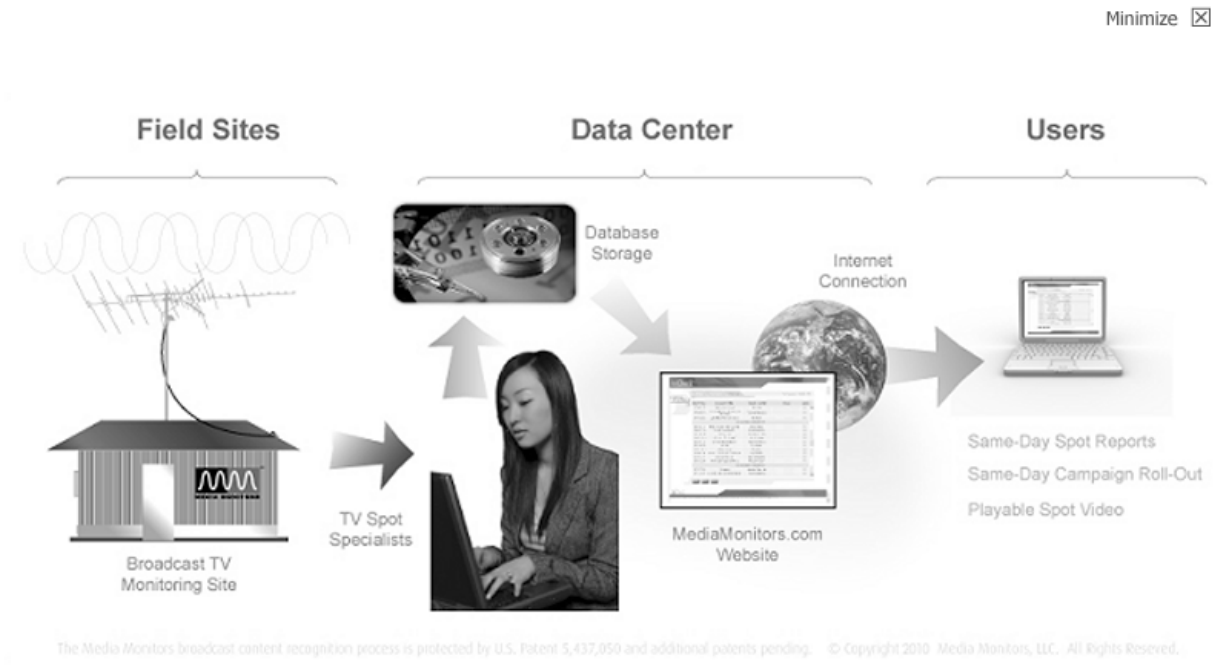
See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).



See Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
creating an abstract of each of the at least one query signals wherein the step of creating an abstract of each of the at least one query signals comprises: inputting each of the at least one query signals to a processor; creating an abstract of each one of a plurality of reference signals	The Media Monitors Service uses a fingerprinting algorithm (it is obvious to one skilled in the art that software must be run on a processor, "a processor," to which the query signal is input) that generates a fingerprint ("create[s] an abstract") from the unknown commercials ("each of the at least one query signals"). On information and belief, the abstract is created using perceptual qualities of the query signal such that the abstract retains a perceptual relationship to the query signal from which it is derived. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and**

[*sic*: query signals] using perceptual qualities of each one of a plurality of reference signals [*sic*: query signals] such that the abstract retains a perceptual relationship to the reference signal [*sic*: query signal] from which it is derived;	**program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
locating an abstract in the reference database that matches the abstract of each at least one query signal; and	The Media Monitors Services identifies the commercial by matching ("locating") an abstract in the reference database that matches the abstract of the unknown commercial ("query signal abstract"). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). How are new advertisements identified? Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is **then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new

advertisers. **Play information** is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface.

See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).

MM at a glance

Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online **reports** anytime you want them, 24 hours a day. Media Monitors provides **competitive intelligence information** for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa.

Using the patented technology of Media Monitors, Sales Executives can have **details on a particular advertisement or an entire campaign** at their fingertips in seconds. Every day, Media Monitors **matches audio to fingerprints of millions of radio, TV and cable commercials**, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors**.**

See Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added).

RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and **tracks the success of each song** in over 1,900 stations in the United States and Canada.

See Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).

"In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of

	every spot and **creates a record of when and where it was aired** for accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
recording the identity of the reference signal whose abstract matched the abstract of each at least one query signal.	The Media Monitors Service then records the identity of the matching commercial ("reference signal") to provide competitive intelligence. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). How are new advertisements identified? Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is **then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. **Play information** is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). **MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms

	and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online **reports** anytime you want them, 24 hours a day. Media Monitors provides **competitive intelligence information** for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have **details on a particular advertisement or an entire campaign** at their fingertips in seconds. Every day, Media Monitors **matches audio to fingerprints of millions of radio, TV and cable commercials**, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors**.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and **tracks the success of each song** in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and **creates a record of when and where it was aired** for accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
7. The method of claim 6, wherein the step of creating an abstract of said at least one reference signal comprises:	As established above, the Media Monitors Service infringes Claim 6, and, on information and belief, the abstracts are created from only a portion of the reference and query signals. Further discovery will be required to chart the infringing instrumentality.

using a portion of said at least one reference signal to create an abstract of said at least one reference signal; and the step of creating an abstract of said at least one query signal comprises: using a portion of said at least one query signal to create an abstract of said at least one query signal.	
8. A method for monitoring a plurality of reference signals, comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a method for monitoring and identifying ("monitoring") commercial spots and musical content ("a plurality of reference signals"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added).

	Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
creating an abstract for each of the plurality of reference signals;	The Media Monitors Service generates a fingerprint ("creates an abstract") of each spot it is monitoring ("plurality of reference signals"). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising**

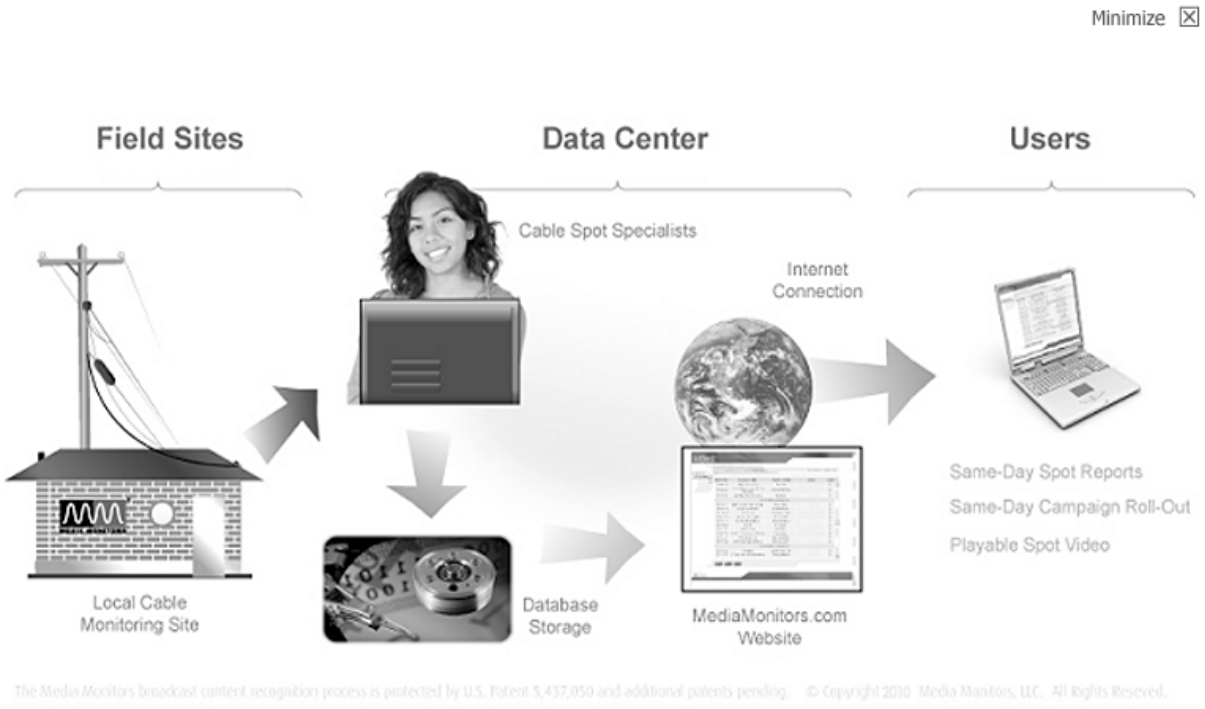
	occurrences 24 hours a daily and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The s**oftware continually crawls each web property each day.** Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
storing each of said abstracts in a reference database;	The Media Monitors Service uses a database ("a reference database") for storing the fingerprints ("abstracts") of the commercial content. **How are new advertisements identified?**

	Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
receiving at least one query signal to be analyzed;	The Media Monitors Service receives unknown commercial spots ("query signal[s]") to be identified ("analyzed"). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. ...

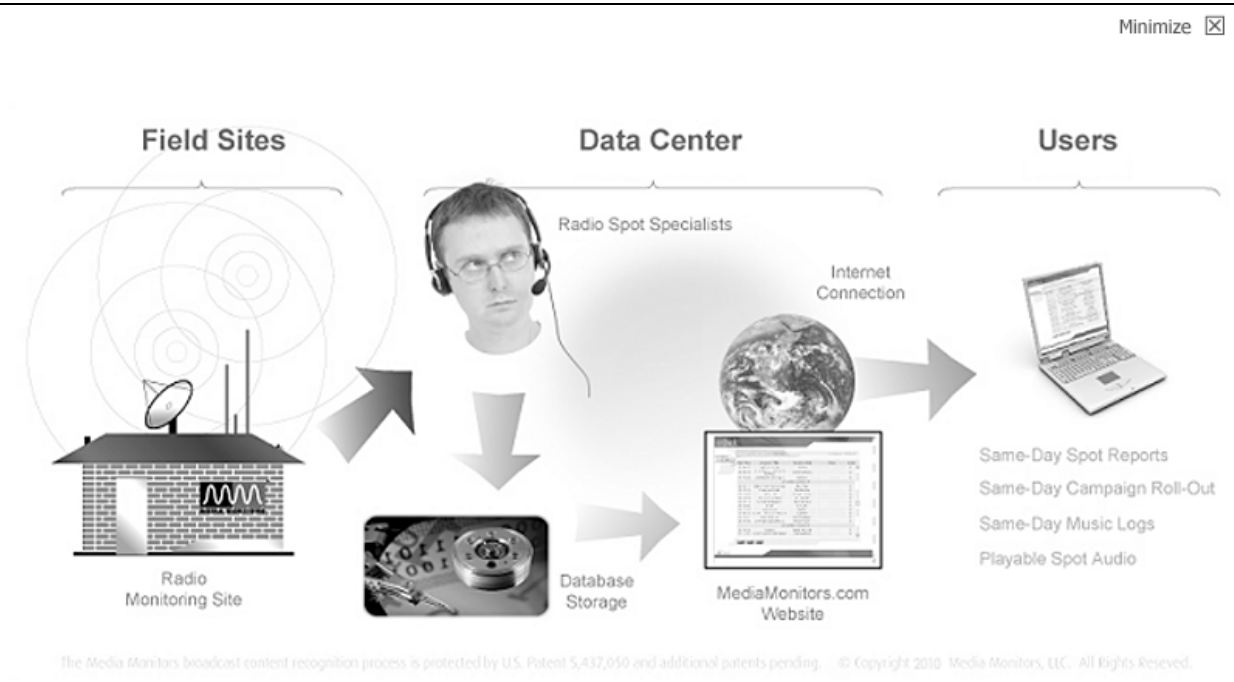
How does Media Monitors know what was played or what ran?

Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computer automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.

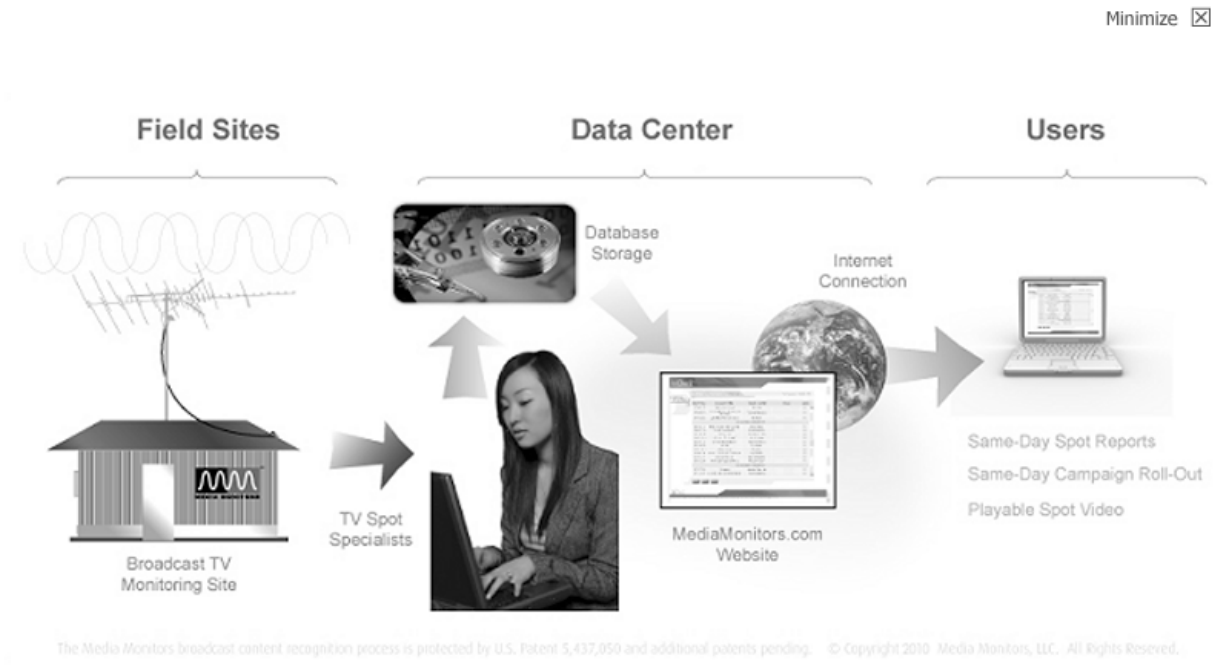
See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).



See Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
creating an abstract of each of the at least one query signals;	The Media Monitors Service generates a fingerprint ("create[s] an abstract") from each unknown commercial ("at least one query signal"). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface.

	See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
locating an abstract in the reference database that matches the abstract of each at least one query signal;	The Media Monitors Services identifies the commercial by matching ("locating") an abstract in the reference database that matches the abstract of the unknown commercial ("query signal abstract"). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). How are new advertisements identified? Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is **then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. **Play information** is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface.

See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).

> **MM at a glance**
>
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>
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See Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added).

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See Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).

> "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and **creates a record of when and where it was aired** for accurate verification."

	See Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
recording the identity of the reference signal whose abstract matched the abstract of each at least one query signal;	The Media Monitors Service then records the identity of the matching commercial ("reference signal") to provide competitive intelligence. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). How are new advertisements identified? Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is **then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. **Play information** is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). **MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with

	highly-sophisticated computer software that allows you to create same-day online **reports** anytime you want them, 24 hours a day. Media Monitors provides **competitive intelligence information** for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have **details on a particular advertisement or an entire campaign** at their fingertips in seconds. Every day, Media Monitors **matches audio to fingerprints of millions of radio, TV and cable commercials**, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors**.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and **tracks the success of each song** in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and **creates a record of when and where it was aired** for accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
creating at least one counter corresponding to one of said plurality of reference signals, said at least one counter being representative of the number of times a match is found between	On information and belief, the Media Monitors Service also creates at least one counter corresponding to one of said plurality of reference signals, said at least one counter being representative of the number of times a match is found between the abstract of said at least one query signal and an abstract of one of said plurality of reference signals. Further discovery will be needed to chart the infringing instrumentality, but the fact that Media Monitors can provide "reports," "competitive intelligence," "details on a particular advertisement or an entire campaign," or "play information," or "track[] the success" of songs or "create[] a record of when" spots were aired indicates infringement:

the abstract of said at least one query signal and an abstract of one of said plurality of reference signals; and	**MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online **reports** anytime you want them, 24 hours a day. Media Monitors provides **competitive intelligence information** for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have **details on a particular advertisement or an entire campaign** at their fingertips in seconds. Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors**.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). How are new advertisements identified? Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. **Play information** is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and **tracks the success of each song** in over 1,900 stations in the United States and Canada.

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incrementing the counter corresponding to a particular reference signal when a match is found between an abstract of said at least one query signal and the abstract of the particular reference signal.	On information and belief, the Media Monitors Service also increments the counter corresponding to a particular reference signal when a match is found between an abstract of said at least one query signal and the abstract of the particular reference signal. Further discovery will be needed to chart the infringing instrumentality, but the fact that Media Monitors can provide "reports," "competitive intelligence," "details on a particular advertisement or an entire campaign," or "play information," or "track[] the success" of songs or "create[] a record of when" spots were aired indicates infringement: **MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online **reports** anytime you want them, 24 hours a day. Media Monitors provides **competitive intelligence information** for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have **details on a particular advertisement or an entire campaign** at their fingertips in seconds. Every day, Media Monitors **matches audio to fingerprints of millions of radio, TV and cable commercials**, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors. *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). RCS developed real-time audio recognition technology, which drives Media Monitors and

	Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and **tracks the success of each song** in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and **creates a record of when and where it was aired** for accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
9. A computerized system for monitoring and analyzing at least one signal [comprising]:	Media Monitors' media monitoring service (the "Media Monitors Service") is a computer-based system ("computerized system") for monitoring and identifying ("monitoring and analyzing") commercial spot content ("at least one signal"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp

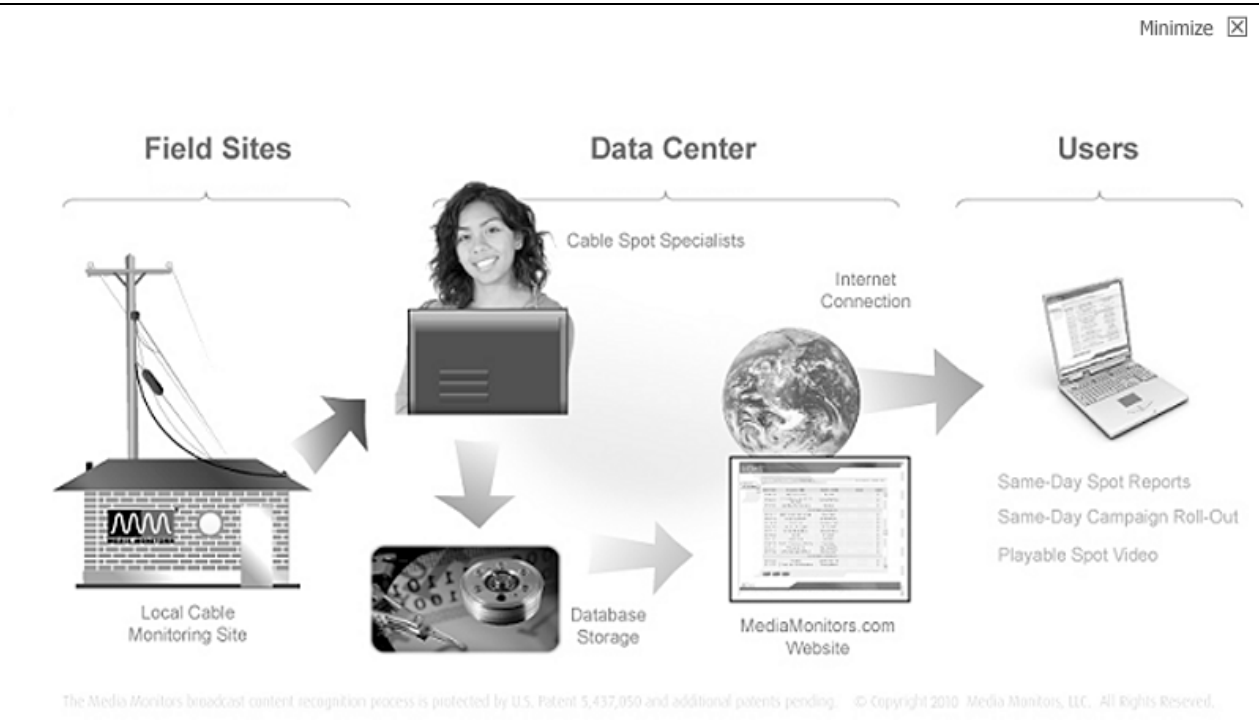
	(emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
a processor that creates an abstract of a signal using selectable criteria;	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "a processor") that generates a fingerprint ("creates an abstract") from the commercial content ("signal"). On information and belief, the abstract is created using selectable criteria. Further discovery is needed to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.

	… **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
a first input that receives at least one reference signal to be monitored, said first input being coupled to said processor such that said processor may generate an abstract for each reference	The Media Monitors Service uses an input (a "first input") to ingest commercial content ("at least one reference signal") to be monitored. As is obvious to anyone skilled in the art, the first input is coupled to the processor, which generates a fingerprint ("abstract") for each reference signal input to it. How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated**

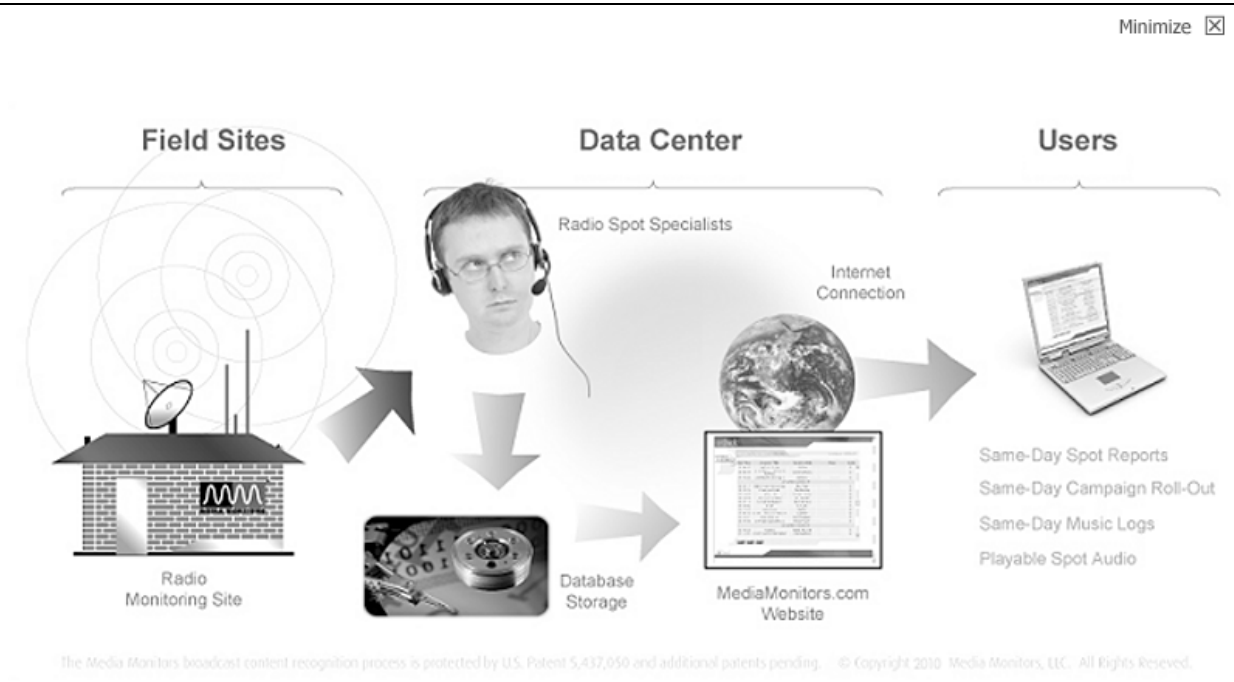
signal input to said processor;	**networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.** … **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: **A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date.** Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements**. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for**

	accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
a reference database, coupled to said processor, that stores abstracts of each at least one reference signal;	The Media Monitors Service uses a database ("a reference database") for storing fingerprints of the content ("abstracts of each at least one reference signal"). As is obvious to anyone skilled in the art, the database is coupled to the processor. As is obvious to anyone skilled in the art, the database is coupled to the processor. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our**

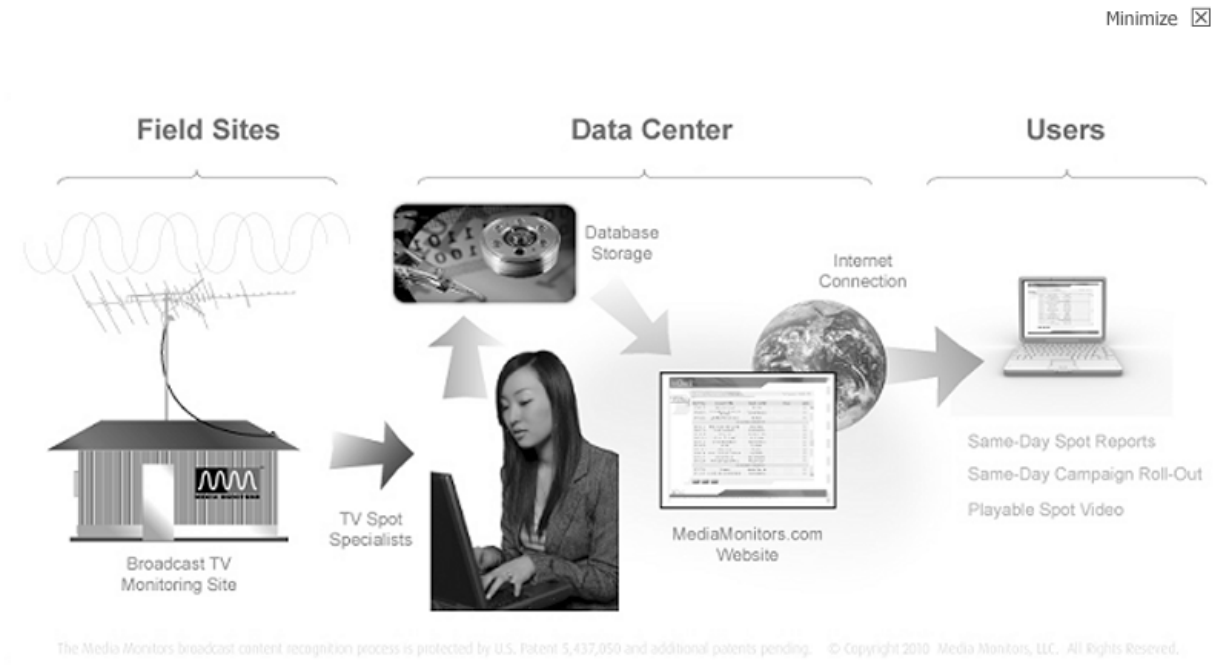
	existing database library and identify new advertisements. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a second input that receives at least one query signal to be analyzed, said second input being coupled to said processor such that said processor may generate an abstract for each query signal;	The Media Monitors Service uses its local monitoring sites ("a second input") to receive unknown commercial spots ("at least one query signal") to be identified ("analyzed"). As is obvious to anyone skilled in the art, the input is coupled to the processor so that the processor can generate an abstract for each query signal. **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets.** Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising** occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).



See Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
a comparing device, coupled to said reference database and to said second input, that compares an abstract of said at least one query signal to the abstracts stored in the reference database to determine if the abstract of said at least one query signal matches any of the stored abstracts;	The Media Monitors Service includes a device ("a comparing device") that compare the fingerprints created from an unknown commercial ("abstract of said at least one query signal") to the fingerprints in the reference database ("abstracts stored in the reference database") to determine if there is a match. As is obvious to anyone skilled in the art, the comparing device is coupled to the database and the second input. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the**

creative files, and captures specific data such as the URL, time, and date.

Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.**

Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days.

See Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).

"In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."**

See Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).

RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada.

See Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).

How are new advertisements identified?

Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface.

See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).

a storage medium coupled to said first input, that stores each of said at least one reference signals to be monitored; and	Media Monitors stores the content it monitors in a database (it is obvious to anyone skilled in the art that a database must include a "storage medium"). In order for the first processor to create fingerprints of the monitored content, it must be coupled to the storage medium via an input ("said first input"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a controller coupled to the first input, the processor, the comparing device, the reference database and the storage medium, said controller causing an abstract for each reference signal being	On information and belief, the Media Monitors Service also includes a controller, coupled to the first input, the processor, the comparing device, the reference database and the storage medium, that, that if the abstract of a second reference signal matches that of one already in the database, it adjusts the criteria being used by the processor and re-generates the reference database so that every reference abstract is unique. Further discovery will be needed to chart the infringing instrumentality.

input for the first time to be compared to all previously stored abstracts in the reference database, such that in the event that the comparing device determines that it cannot distinguish between the abstract of a reference signal being input for the first time from a previously stored abstract in the reference database, the controller adjusts the criteria being used by the processor and re-generates the reference database, by re-processing each reference signal stored on the storage medium to create new abstracts and storing said new abstracts in the reference database.	
10. The system of claim 9, wherein the controller includes a means to adjust compression rates at which the processor processes a signal to create an abstract.	As established above, the Media Monitors Service infringes Claim 9 and, on information and belief, the controller includes a means to adjust compression rates at which the processor processes a signal to create an abstract. Further discovery will be needed to chart the infringing instrumentality.
11. A computerized system for monitoring and analyzing at least one signal [comprising]:	Media Monitors' media monitoring service (the "Media Monitors Service") is a computer-based system ("computerized system") for monitoring and identifying ("monitoring and analyzing") commercial spot content ("at least one signal"). **MM at a glance** **Media Monitors is the leader in <u>radio spot monitoring</u> (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast <u>monitoring</u> technology <u>reviews</u>**

	top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface.

	See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
a processor that creates an abstract of a signal using selectable criteria;	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "a processor") that generates a fingerprint ("creates an abstract") from the content ("signal"). On information and belief, the abstract is created using selectable criteria. Further discovery is needed to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the

	United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
a first input that receives at least one reference signal to be monitored, said first input being coupled to said processor such that said processor may generate an abstract for each reference signal input to said processor;	The Media Monitors Service uses an input (a "first input") to ingest the content ("at least one reference signal") to be monitored. As is obvious to anyone skilled in the art, the input is coupled to the processor so that the processor can generate a fingerprint for each reference signal input to it. How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.** … **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: **A proprietary program finds display advertising from each website, downloads the**

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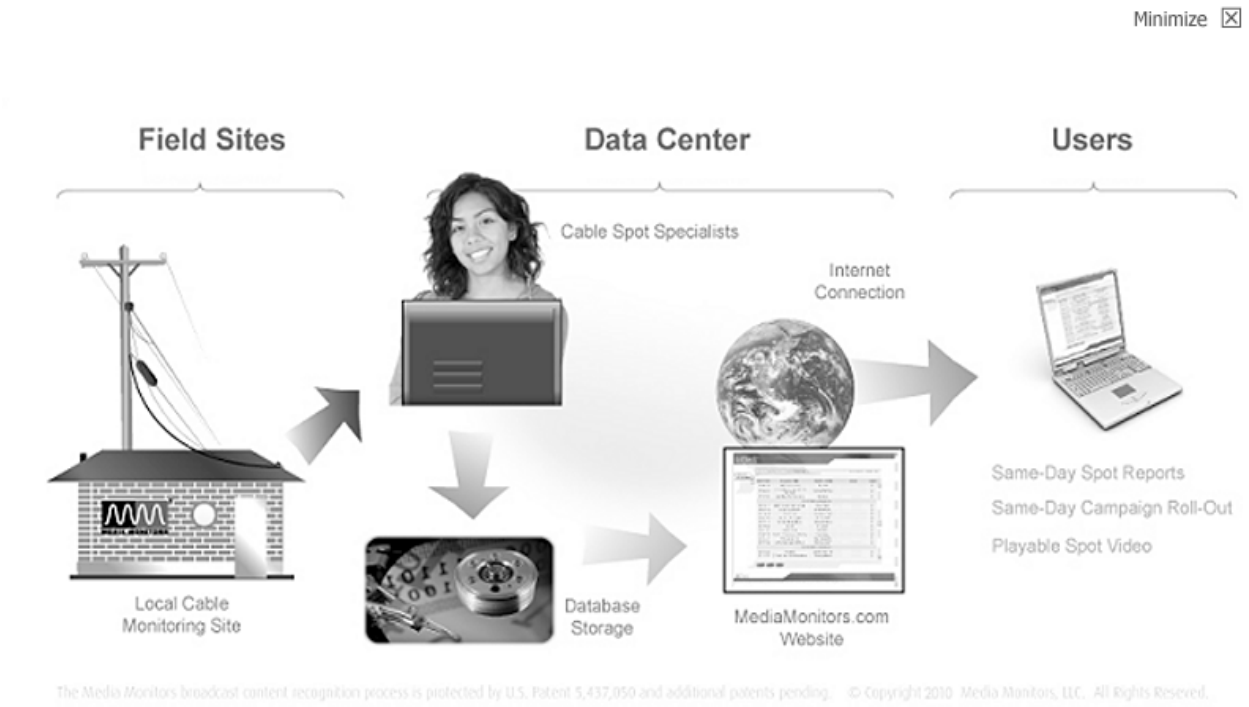
a reference database, coupled to said processor, that stores abstracts of each at least one reference signal;	The Media Monitors Service uses a database ("a reference database") for storing the fingerprints of the content ("abstracts of each at least one reference signal"). As is obvious to anyone skilled in the art, the database is coupled to the processor. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program**

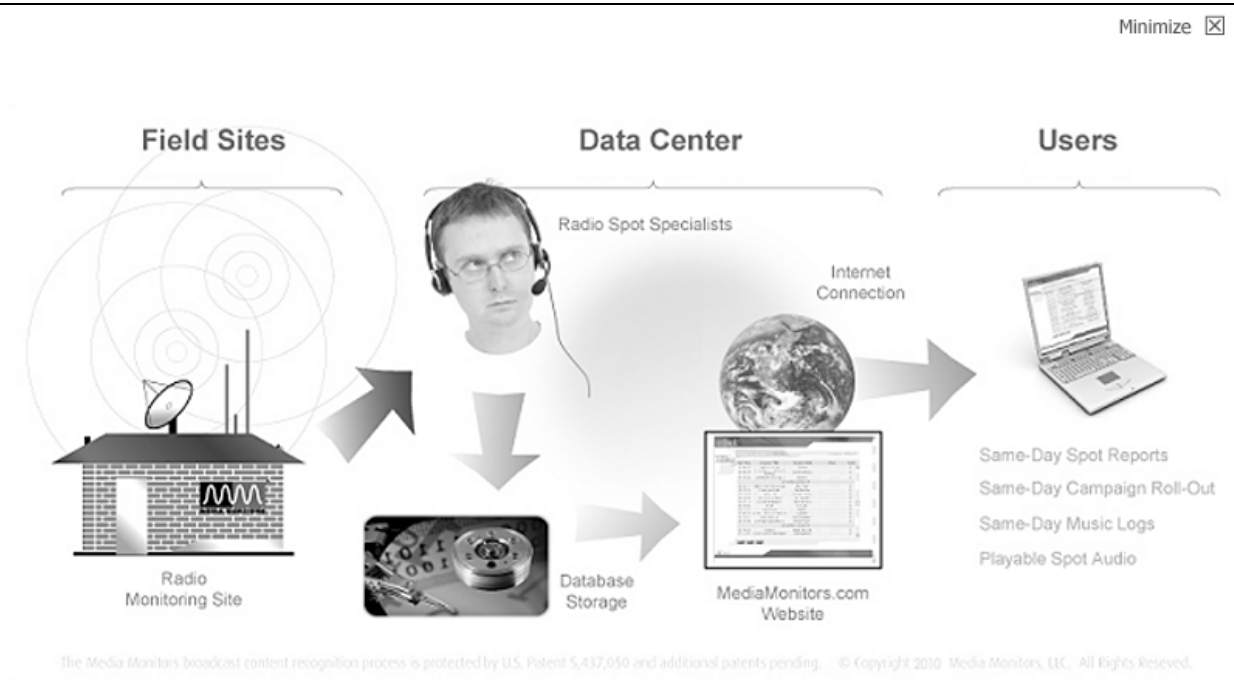
	output. These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a second input that receives at least one query signal to be analyzed, said second input being coupled to said processor such that said processor may generate an abstract for each query signal;	The Media Monitors Service uses its local monitoring sites ("a second input") to receive unknown commercial spots ("at least one query signal") to be identified ("analyzed"). As is obvious to anyone skilled in the art, the input is coupled to the processor so that the processor can generate a fingerprint for each query signal input to it. **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets.** Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising**

occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."

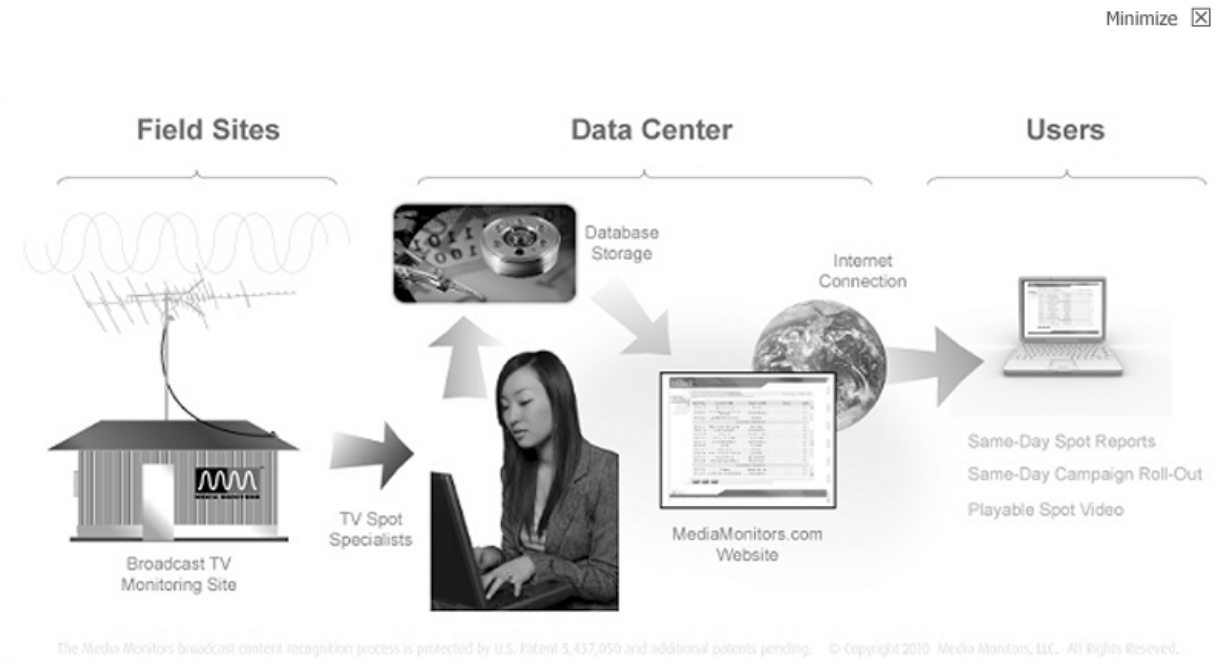
See Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).



See Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
a comparing device, coupled to said reference database and to said second input, that compares an abstract of said at least one query signal to the abstracts stored in the reference database to determine if the abstract of said at least one query signal matches any of the stored abstracts, wherein the comparing device	The Media Monitors Service includes a device (a "comparing device," coupled to the reference database and to the second input) that compares the fingerprint created from an unknown commercial ("abstract of said at least one query signal") to the fingerprints in the reference database ("abstracts stored in the reference database") to determine if there is a match. On information and belief, the comparing device identifies at least two abstracts in the reference database that match the abstract of said at least one query signal and creates an index of relatedness to said at least one query signal for each of said at least two matching abstracts. Further discovery will be needed to chart the infringing instrumentality, but the following indicates infringement: The **online advertising data collection & processing** follows four steps, listed below:

identifies at least two abstracts in the reference database that match the abstract of said at least one query signal and an index of relatedness to said at least one query signal for each of said at least two matching abstracts.	Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users

	can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
12. The system of claim 11, further comprising: a security controller that controls access to a secured area, such that access is granted only if the comparing device confirms that an abstract of said at least one query signal matches an abstract of said at least one reference signal	As established above, the Media Monitors Service infringes Claim 11 and, on information and belief, further includes a security controller that grants access only if the comparing device confirms that an abstract of said at least one query signal matches an abstract of said at least one reference signal. Further discovery will be needed to chart the infringing instrumentality.
13. The system of claim 11, further comprising: a recorder that records the identity of the reference signal whose abstract matched the abstract of said at least one query signal; and a report generator that generates a report that identifies the reference signals whose abstracts matched the abstract of said at least one query signal.	As established above, the Media Monitors Service infringes Claim 11 and, on information and belief, further comprises a recorder that records the identity of the reference signal whose abstract matched the abstract of said at least one query signal; and a report generator that generates a report that identifies the reference signals whose abstracts matched the abstract of said at least one query signal. Further discovery will be needed to chart the infringing instrumentality, but the following indicates infringement: **MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online **reports** anytime you want them, 24 hours a day. Media Monitors provides **competitive intelligence information** for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have **details on a particular advertisement or an entire campaign** at their fingertips in seconds. Every day, Media Monitors **matches audio to fingerprints of millions of radio, TV and cable commercials**, and

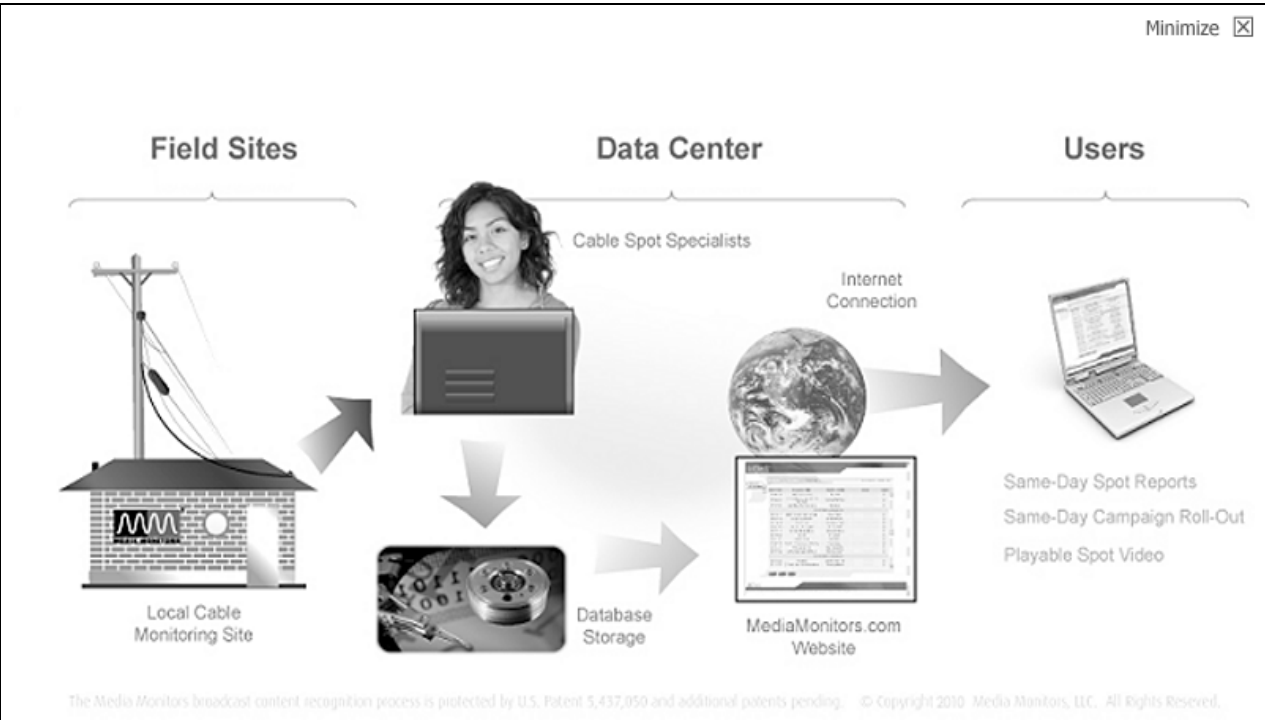
	scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors**.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and **tracks the success of each song** in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and **creates a record of when and where it was aired** for accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
14. A electronic system for monitoring and analyzing at least one signal, comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a computer-based system ("electronic system") for monitoring and identifying ("monitoring" and "analyzing") commercial spot content ("at least one signal"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa.

	Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
a first input that receives at least one reference signal to be monitored,	The Media Monitors Service uses an input (a "first input") to ingest content ("at least one reference signal") to be monitored. How does Media Monitors know what was played or what ran?

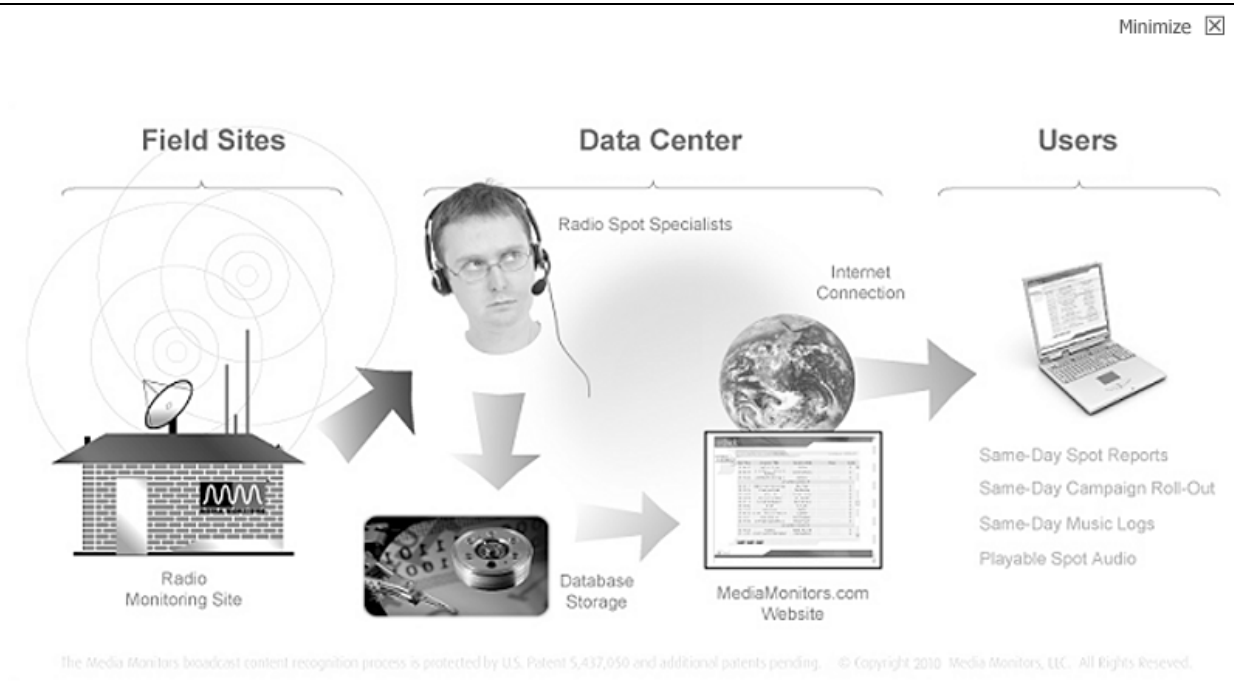
	Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: **A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date.** Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements**. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a first processor that creates an abstract of each reference signal input to said first processor	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "a first processor") that generates a fingerprint ("creates an abstract") from the

through said first input;	content ("reference signal") input to it **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis

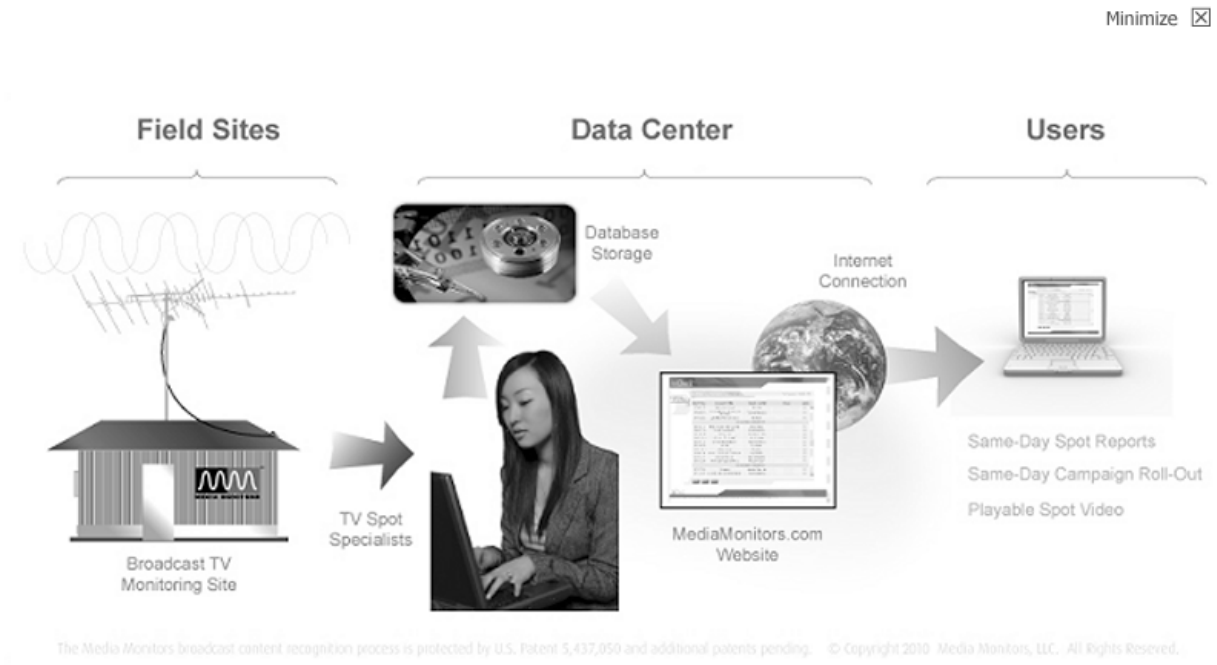
	added)
a second input that receives at least one query signal to be analyzed,	The Media Monitors Service uses its local monitoring sites ("a second input") to receive unknown commercial spots ("at least one query signal") to be identified ("analyzed"). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets.** Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising** occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).



See Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
a second processor that creates an abstract of each query signal;	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, on information and belief, "a second processor") that takes the unknown commercial ("query signal") and generates a fingerprint ("creates an abstract") of it. On information and belief, the abstract comprises signal characteristic parameters of the query signal. Further discovery is needed to chart the infringing instrumentality, but the following indicates infringement: **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research

	and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
a reference database that stores abstracts of each at least one reference signal;	The Media Monitors Service uses a database ("a reference database") for storing the fingerprints of the content it monitors ("abstracts of each at least one reference signal"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display**

	advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a comparing device that compares an abstract of said at least one query signal to the abstracts stored in the reference database to determine if the abstract of said at least one query signal matches any of the stored abstracts;	The Media Monitors Service includes a server or other computer ("a comparing device") that compares the fingerprints created from the unknown commercials ("abstract[s] of said at least one query signal") to the fingerprints in the reference database ("abstracts stored in the reference database") to determine if there is a match. A match indicates that the query signal is a version of at least one of the reference signals. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of

	each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
a storage medium coupled to said first input, that stores each of said at least one reference signals to be monitored; and	The Media Monitors Service stores the content it monitors in a database (it is obvious to anyone skilled in the art that a database must include a "storage medium"). In order for the first processor to create fingerprints of the monitored content, it must be coupled to the storage medium via the first input. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our**

	existing database library and identify new advertisements. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a controller that compares an abstract for each reference signal being input for the first time to be compared to all previously stored abstracts in the reference database, such that in the event that the comparing device determines that it cannot distinguish between the abstract of a reference signal being input for the first time from a previously stored abstract in the reference database, the controller adjusts the criteria being used by the processor and re-generates the reference database, by re-processing each reference signal stored on the storage medium to create new abstracts and storing said new abstracts in the reference database.	On information and belief, the Media Monitors Service also includes a controller that, that if the abstract of a second reference signal matches that of one already in the database, it adjusts the criteria being used by the processor and re-generates the reference database so that every reference abstract is unique. Further discovery will be needed to chart the infringing instrumentality.

Blue Spike – Monitoring and Analyzing Signals – U.S. Patent 7,949,494

Preliminary Infringement Claim Chart

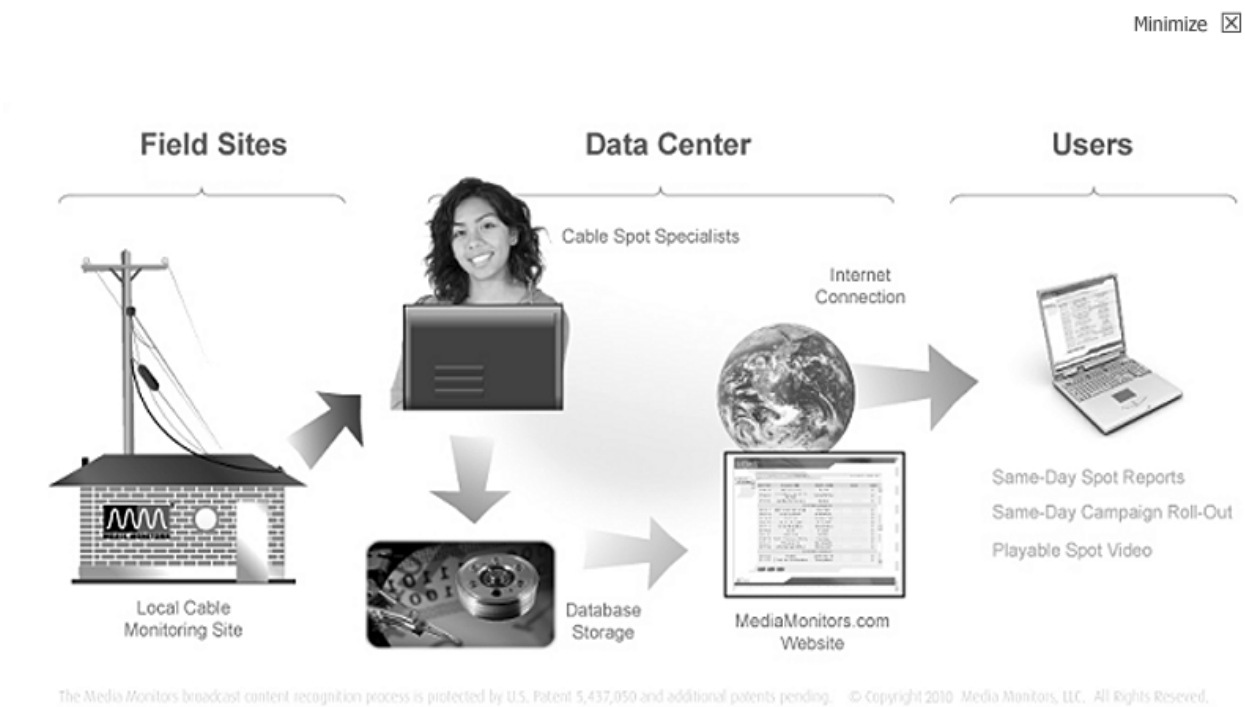
Claims	**Clear Channel Broadcasting's Media Monitors and RCS monitoring and verification software, systems, and technology**
1. A system for identifying at least one reference signal comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a system for monitoring and identifying ("identifying") commercial spot content ("at least one reference signal"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to

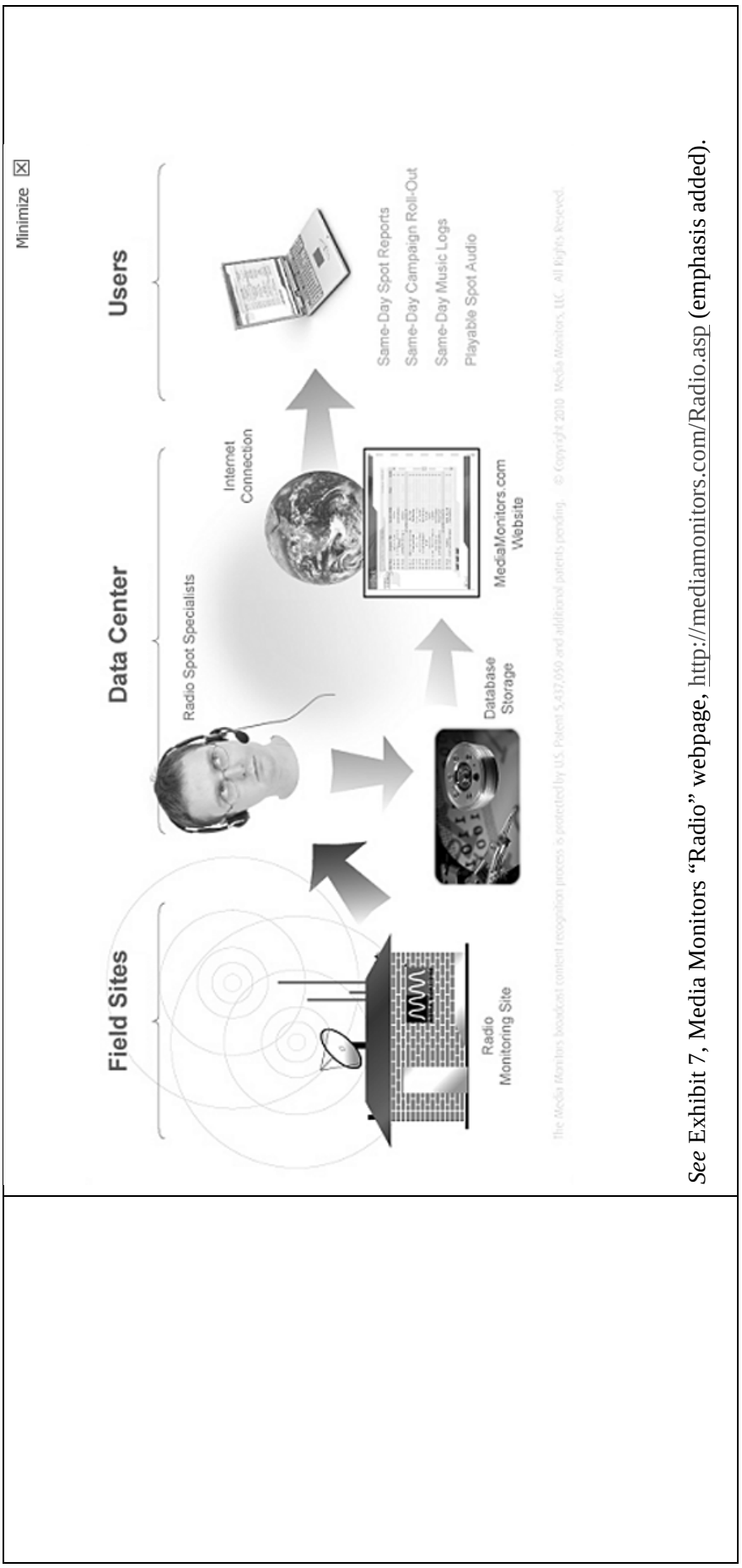
	broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
a first input that receives at least one reference signal to be identified;	The Media Monitors Service uses an input (a "first input") to ingest commercial spots ("at least one reference signal") to be identified. How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.** … **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface.

	See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: **A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date.** Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements**. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a first processor that creates an abstract of each reference signal input to said first processor through said first input wherein the abstract comprises signal characteristic parameters configured to differentiate between versions of said reference signal;	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "a first processor") that generates fingerprints ("creates an abstract") from each commercial ("reference signal") input to it. On information and belief, the abstract comprises signal characteristic parameters configured to differentiate between different versions of the reference signal. Further discovery is needed to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program

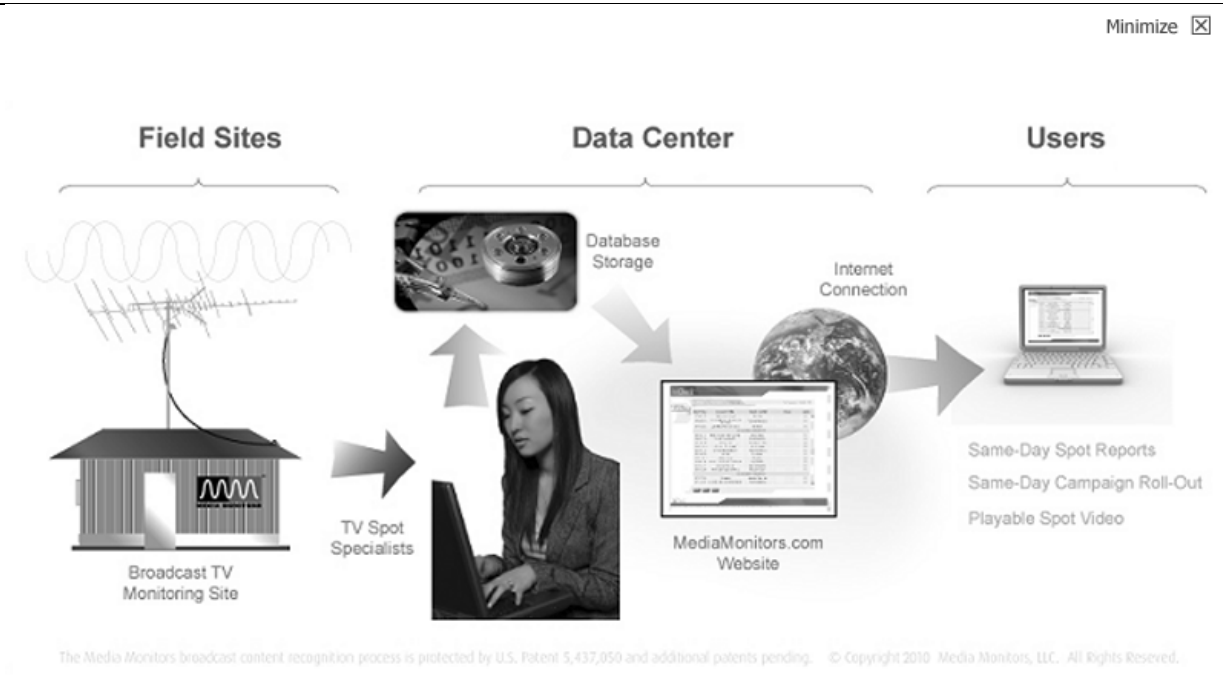
	output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
at least one reference database for storing at least one abstract;	The Media Monitors Service uses a database ("at least one reference database") for storing the fingerprint ("at least one abstract"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).

	The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a receiver that receives at least one query signal;	The Media Monitors Service uses its local monitoring sites ("a receiver") to receive unknown commercial spots ("at least one query signal"). How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computer automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.** … **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface.

	See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).  *See* Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
a second processor that creates an abstract of said query signal received by said receiver, based on the parameters; and	The Media Monitors Service uses audio fingerprinting software (it is obvious to one skilled in the art that software must be run on a processor, "a second processor") to generate a fingerprint ("create[] an abstract") of the unknown commercial ("query signal") based on the parameters. **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web

	interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification.**" *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
a comparing device that compares the created query signal abstract to the reference signal abstracts in the at least one database, each abstract in the at least one reference database corresponding to a version of a reference signal, to determine whether the query signal abstract matches any of the stored at least one abstract in the at least one reference database.	The Media Monitors Service includes a device ("a comparing device") that compares the fingerprint created from the unknown commercial ("the created query signal abstract") to the reference fingerprints previously stored in the reference database ("the reference signal abstract in the at least one database") to determine if they match. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).

	RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
2. The system of claim 1, further comprising: a controller that enables authorized transmission or use of the corresponding version of the reference signal based on whether a match was determined by the comparing device.	As established above, the Media Monitors Service infringes Claim 1, and further comprises a controller that enables authorized transmission or use of the corresponding version of the reference signal based on whether a match was determined by the comparing device. To wit, the Media Monitors Service forwards ("enables authorized transmission or use of") the spots and program content that it identifies to the company's Data Centers. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to **identify spots, and program output**. **These are forwarded to our Data Centers**, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).

	The online advertising data collection & processing follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date. Step 3: Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements. **Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data**. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added).
3. The system of claim 1, wherein the reference database is created by at least one of a music company, a movie studio, an image archive, an owner of a general computing device, a user of the reference signal, an interne [*sic*] service provider, an information technology company, a body politic, a telecommunications company and	As established above, the Media Monitors Service infringes Claim 1, and Media Monitors, an "information technology company," or at least the "owner of a general computing device," creates the database of Claim 1. **MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad TrackingSM, Broadcast TV and Local Cable TV and provides sales and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top-rated advertising media in major markets. It's our combination of expert human attention coupled with **highly-sophisticated computer software** that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South

combinations thereof.	Africa. *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
4. The system of claim 1, wherein the reference signals comprise at least one of images, audio, video, and combinations thereof.	As established above, the Media Monitors Service infringes Claim 1, and the content ("data signals") monitored comes from both radio ("audio") and TV ("video"). **MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, **Broadcast TV and Local Cable TV** and provides sale and marketing tools for media

	research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. Every day, Media Monitors matches audio to fingerprints of millions of **radio**, **TV** and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors. *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added).
5. The system of claim 1, wherein the stored abstracts are derived from one of a cognitive feature or a perceptible characteristic of the associated reference signals.	As established above, the Media Monitors Service infringes Claim 1, and the stored abstracts are derived from one of a cognitive feature or a perceptible characteristic of the associated reference signals. Further discovery will be needed to chart the infringing instrumentality.
6. The system of claim 1, furthering [*sic*] comprising a security controller to apply a cryptographic protocol to at least one created abstract, at least one database abstract or both at least one created abstract and at least one database abstract.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, further includes a security controller that applies a cryptographic protocol to at least one created abstract, at least one database abstract, or both. Further discovery will be needed to chart the infringing instrumentality.
7. The system of claim 1, wherein each of the stored abstracts comprise information	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, the stored abstracts comprise information configured to differentiate variations of each referenced corresponding signal.

configured to differentiate variations of each referenced corresponding signal.	Further discovery will be needed to chart the infringing instrumentality.
8. The system of claim 1, further comprising a storage medium for storing information associated with the comparing device to store information to enable at least one of a re-calibration of the database and a heuristic-based adjustment of the database.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, further comprises a storage medium for storing information associated with the comparing device to store information to enable at least one of a re-calibration of the database and a heuristic-based adjustment of the database. Further discovery will be needed to chart the infringing instrumentality.
9. The system of claim 1, further comprising a storage medium for storing information associated with the comparing device to store information to enable a computational efficiency adjustment of the database, an adjustment for database collisions and/or null cases, a change to the recognition or use parameters governing the database and combinations thereof.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, further comprises a storage medium for storing information associated with the comparing device to store information to enable a computational efficiency adjustment of the database, an adjustment for database collisions and/or null cases, a change to the recognition or use parameters governing the database and combinations thereof. Further discovery will be needed to chart the infringing instrumentality.
10. The system of claim 1, further comprising applying one of a relatedness index or measure of similarity to generate uniquely identifiable information to determine authorization by the comparing device.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, further comprises applying one of a relatedness index or measure of similarity to generate uniquely identifiable information to determine authorization by the comparing device. Further discovery will be needed to chart the infringing instrumentality.

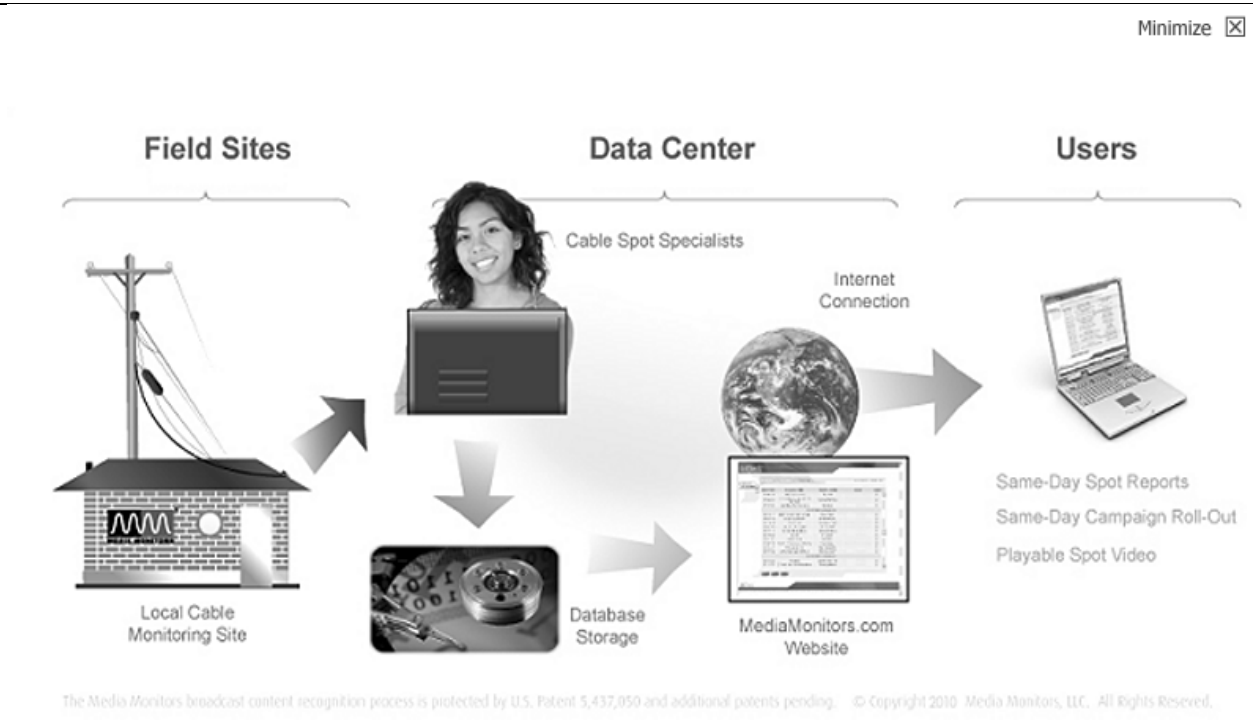
11. A system for analyzing and identifying at least one reference signal, comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a system for monitoring and identifying ("identifying and analyzing") commercial spot content ("at least one reference signal"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?**

	Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
a first input for receiving at least one reference signal to be identified,	The Media Monitors Service uses an input (a "first input") to ingest commercial spots ("at least one reference signal") to be identified. How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.** … **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: **A proprietary program finds display advertising from each website, downloads the**

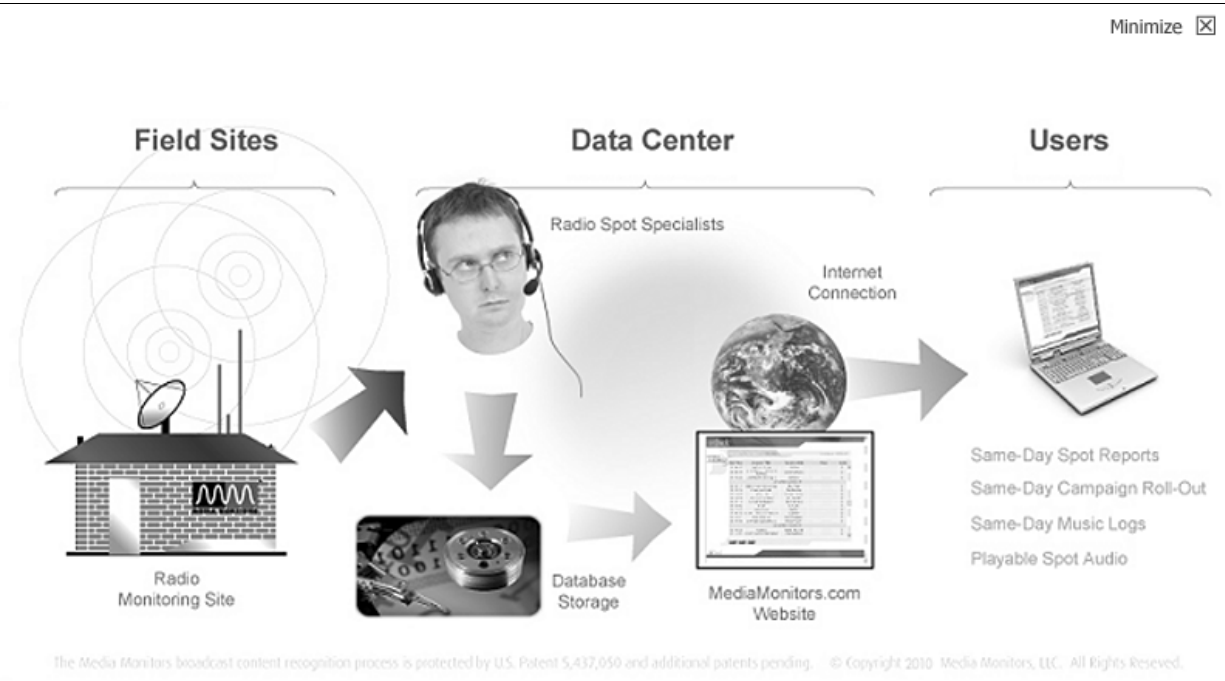
	creative files, and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements**. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a first processor for creating an abstract of each reference signal received based on perceptual characteristics representative of parameters to differentiate between versions of the reference signal;	The Media Monitors Service uses fingerprint software (it is obvious to one skilled in the art that software must be run on a processor, "a first processor") that generates a fingerprint ("creates an abstract") of each commercial spot ("each reference signal"). On information and belief, the abstract is based on perceptual characteristics representative of parameters that differentiate between versions of the reference signal. Further discovery is needed to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising**

	occurrences 24 hours a daily and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
a reference database for storing abstracts of each reference signal received in a database;	The Media Monitors Service uses a database ("a reference database") to store the reference fingerprints ("abstracts of each reference signal"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to

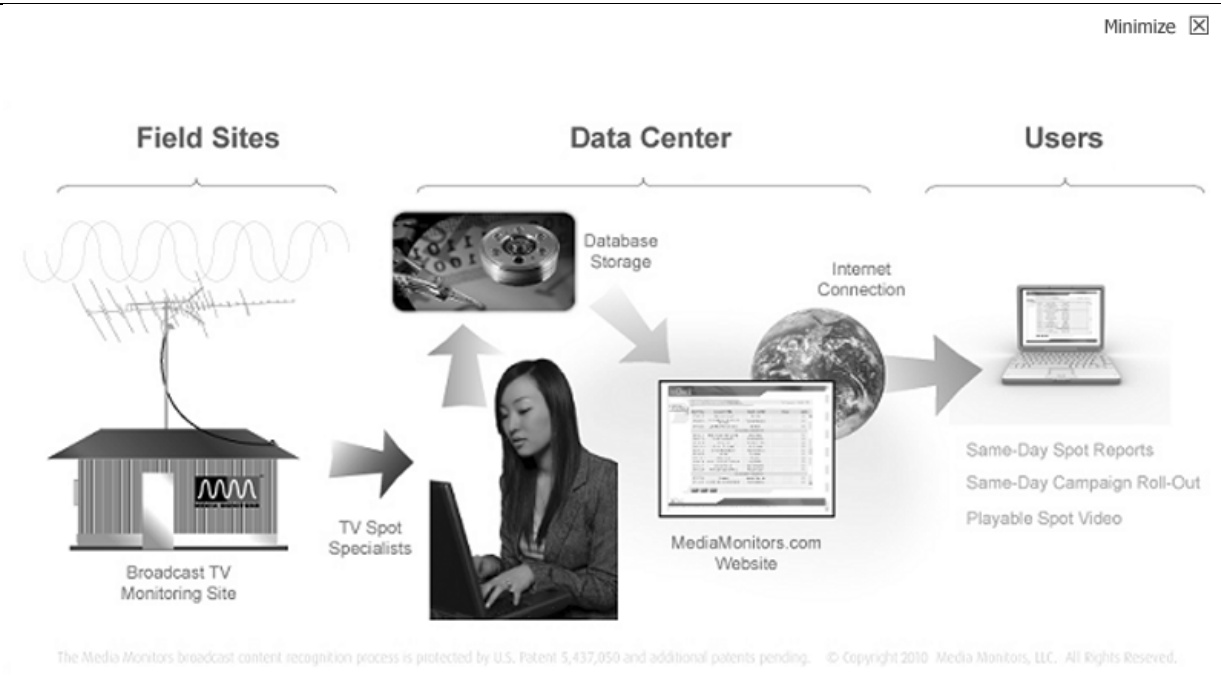
	our existing database library and identify new advertisements. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a second input for receiving at least one query signal to be identified,	The Media Monitors Service uses its local monitoring sites ("a second input") to receive the unknown commercial spots ("at least one query signal") to be identified. How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computer automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.** … **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).



See Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
a second processor for creating an abstract of the received query signal based on the parameters;	The Media Monitors Service uses audio fingerprinting software (it is obvious to one skilled in the art that software must be run on a processor, "a second processor") to generate a fingerprint ("creat[e] an abstract") of the unknown commercial ("query signal") based on the parameters. **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web

	interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
and a comparing device for comparing an abstract of said received query signal to the abstracts stored in the database to determine if the abstract of said received query signal is related to any of the stored abstracts.	The Media Monitors Service includes a device ("a comparing device") that compares the fingerprint created from the unknown commercial ("abstract of said received query signal") to the reference fingerprints previously stored in the reference database ("abstracts stored in the database") to determine if they match or can be recognized or identified (are "related"). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."**

	See Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). > **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). > **How are new advertisements identified?** > **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
12. The system of claim 11, wherein said database is independently accessible.	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, the database is independently accessible. Further discovery will be needed to chart the infringing instrumentality, but the following indicates infringement: > How are new advertisements identified? > Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. **Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface.** *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).

	MM at a glance Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. **All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added).
13. The system of claim 11, wherein said received query signal is independently stored.	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, stores the query signal independently. Further discovery will be needed to chart the infringing instrumentality.
14. The system of claim 11, wherein the parameters used by the comparing device to compare a received query signal abstract with a stored reference signal abstract are adjustable.	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, the criteria used to compare a received query signal abstract with a stored reference signal abstract are adjustable. Further discovery will be needed to chart the infringing instrumentality.
15. The system of claim 11, wherein the stored abstracts comprise a self-similar representation of at least one	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, the stored abstracts comprise a self-similar representation of at least one reference signal. Further discovery will be needed to chart the infringing instrumentality.

reference signal.	
16. The system of claim 11, wherein at least two of the stored abstracts comprise information corresponding to two versions of at least one reference signal.	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, at least two of the stored abstracts comprise information corresponding to two versions of at least one reference signal. Further discovery will be needed to chart the infringing instrumentality.
17. The system of claim 11, wherein at least one abstract comprises data describing a portion of the characteristics of its associated reference signal.	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, at least one abstract comprises data describing a portion of the characteristics of its associated reference signal. Further discovery will be needed to chart the infringing instrumentality.
18. The system of claim 17, wherein the characteristics of the reference signal being described comprise at least one of a perceptible characteristic, a cognitive characteristic, a subjective characteristic, a perceptual quality, a recognizable characteristic or combinations thereof.	As established above, the Media Monitors Service infringes Claim 17, and, on information and belief, the characteristics of the reference signal being described comprise at least one of a perceptible characteristic, a cognitive characteristic, a subjective characteristic, a perceptual quality, a recognizable characteristic or combinations thereof. Further discovery will be needed to chart the infringing instrumentality.
19. The system of claim 11, wherein a stored abstract comprises data unique to a variation of its corresponding reference signal.	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, a stored abstract comprises data unique to a variation of its corresponding reference signal. Further discovery will be needed to chart the infringing instrumentality.
20. The system of claim 11, wherein the system further comprises a security controller for applying a cryptographic protocol	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, the process further comprises a security controller for applying a cryptographic protocol to the abstract of said reference signal, said query signal, or both said reference signal and said query signal. Further discovery will be needed to chart the

to the abstract of said reference signal, said query signal, or both said reference signal and said query signal.	infringing instrumentality.
21. The system of claim 20, wherein the cryptographic protocol is one of at least a hash or digital signature and further comprising storing the hashed abstract and/or digitally signed abstract in the reference database.	As established above, the Media Monitors Service infringes Claim 20, and, on information and belief, the cryptographic protocol is one of at least a hash or digital signature and further comprising storing the hashed abstract and/or digitally signed abstract in the reference database. Further discovery will be needed to chart the infringing instrumentality.
22. The system of claim 11, further comprising a transmitter for distributing at least one signal based on the comparison step.	As established above, the Media Monitors Service infringes Claim 11, and, on information and belief, further comprises a transmitter for distributing at least one signal based on the comparison step. Further discovery will be needed to chart the infringing instrumentality.
23. The system of claim 22, further comprising a processor for applying a watermarking technique to the at least one signal to be distributed.	As established above, the Media Monitors Service infringes Claim 22, and, on information and belief, further comprises a processor for applying a watermarking technique to the at least one signal to be distributed. Further discovery will be needed to chart the infringing instrumentality.
24. A system for identifying a plurality of reference signals comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a system for monitoring and identifying ("identifying") commercial spot content ("a plurality of reference signals"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides

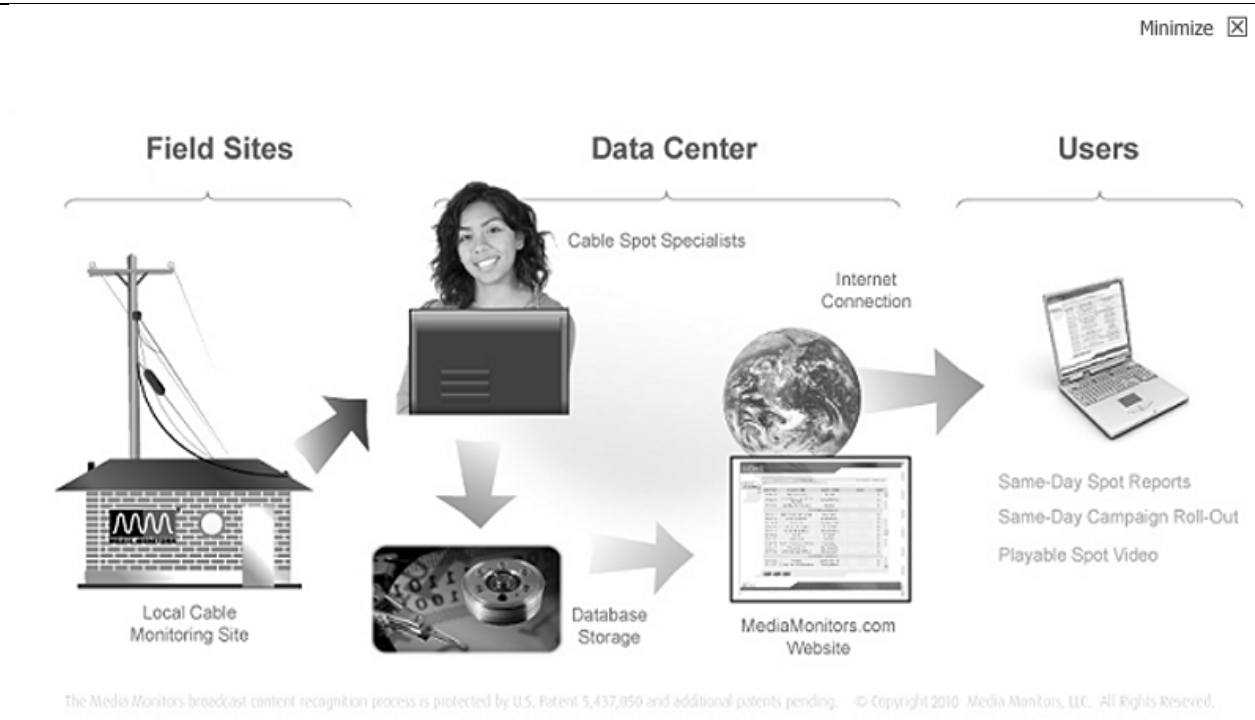
	competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added)..
a first input that receives a plurality of reference signals to be	The Media Monitors Service uses an input (a "first input") to ingest commercial spots ("a plurality of reference signals") to be identified.

identified;	How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.** … **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: **A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date.** Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements**. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).

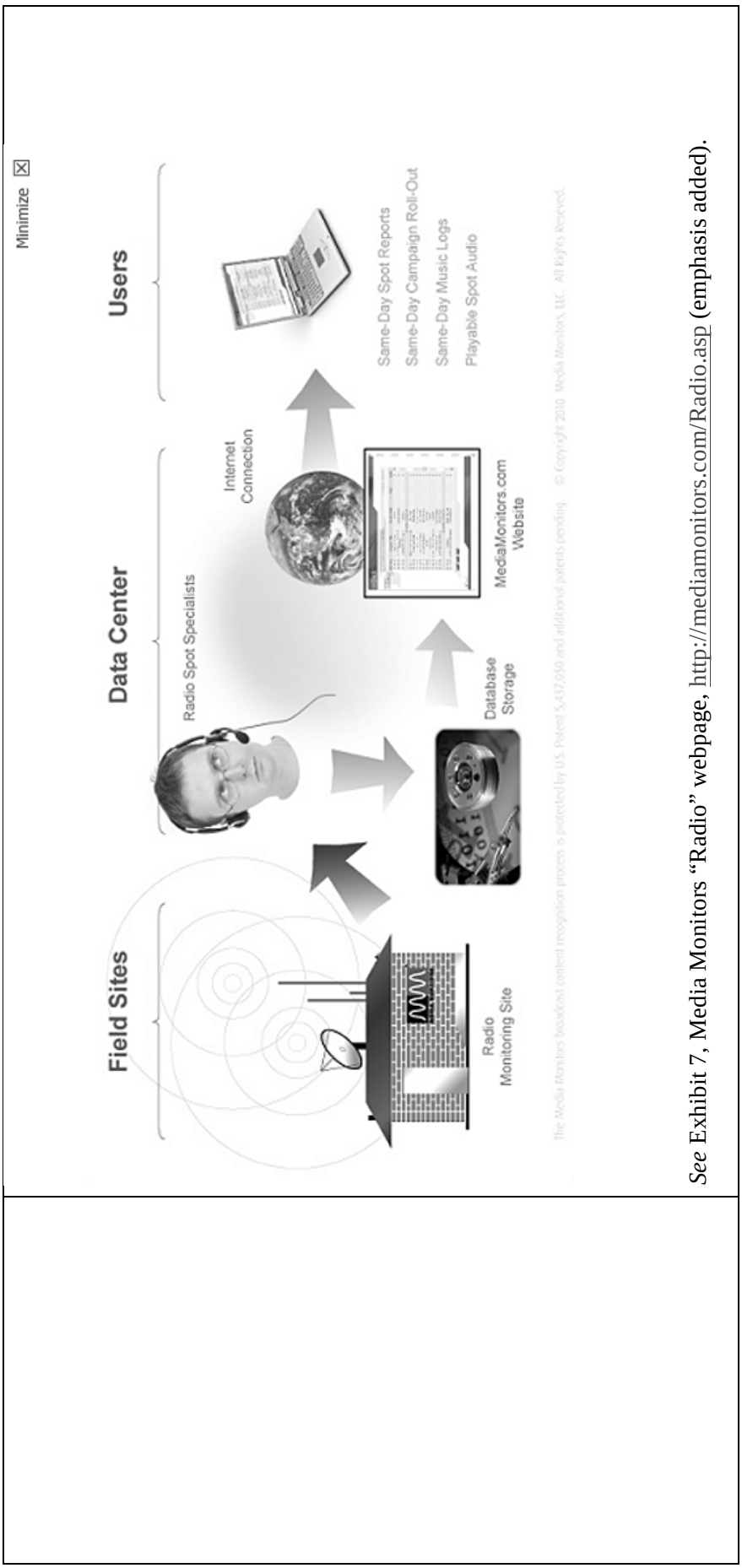
a first processor that creates an abstract for each of the plurality of reference signals input to said first processor through said first input wherein the abstract comprises signal characteristic parameters configured to differentiate between versions of at least one reference signal;	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "a first processor") that generates a fingerprint ("creates an abstract") from each commercial ("each of the plurality of reference signals"). On information and belief, the abstract comprises signal characteristic parameters configured to differentiate between different versions of the reference signal. Further discovery is needed to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase

	produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
at least one reference database for storing the plurality of created abstracts;	The Media Monitors Service uses a database ("at least one reference database") for storing the fingerprints ("plurality of created abstracts"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a receiver for receiving a query signal;	The Media Monitors Service uses its local monitoring sites ("a receiver") to receive an unknown commercial spot ("query signal").

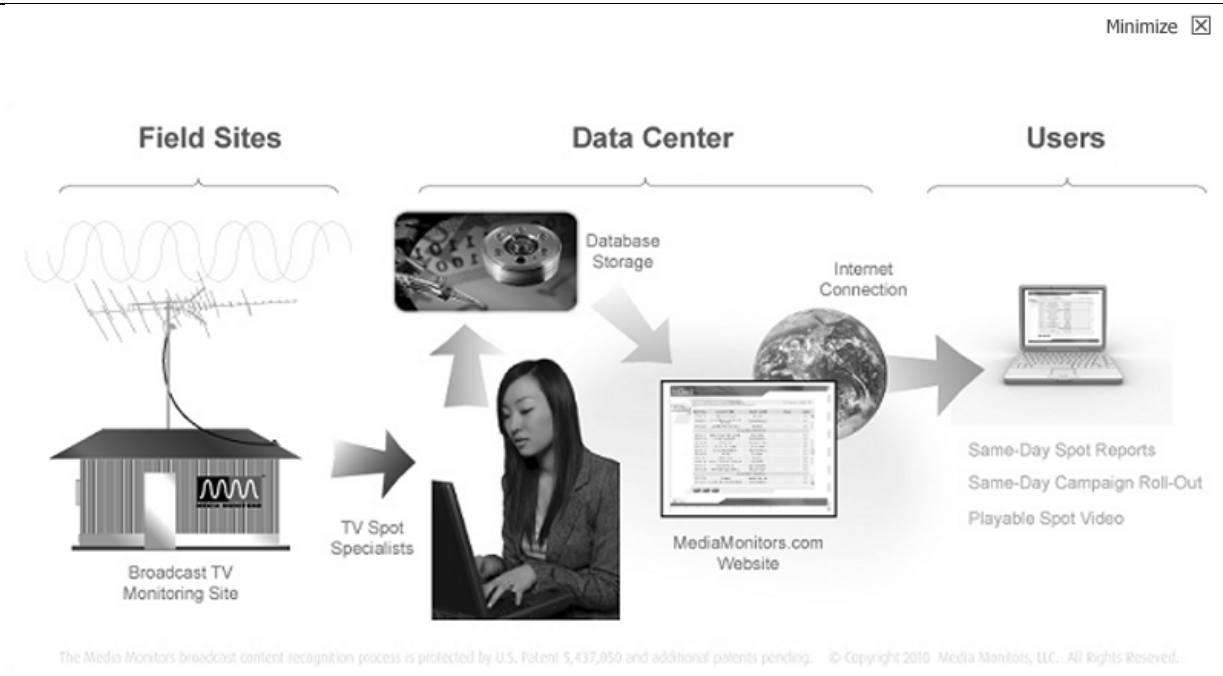
	How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computer automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.** … **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added)



See Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
a second processor that creates an abstract of said query signal received by said receiver, based on the parameters; and	The Media Monitors Service uses fingerprinting software (it is obvious to one skilled in the art that software must be run on a processor, "a second processor") to generate a fingerprint ("creat[e] an abstract") of the unknown commercial ("query signal") based on the parameters. **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web

	interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added) "**In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
a comparing device that compares the created query signal abstract to the abstracts stored in the at least one database, to determine whether the query signal abstract matches any of the stored abstracts in the at least one reference database.	The Media Monitors Service compares the fingerprint created from the unknown commercial ("the created query signal abstract") to the reference fingerprints previously stored in the reference database ("abstracts stored in the at least one database") to determine if they match. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).

	RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added)
25. The system of claim 24, wherein the first and second processors are the same processor.	As established above, the Media Monitors Service infringes Claim 24, and, on information and belief, in some iterations, the first and second processors are the same processor. Further discovery will be needed to chart the infringing instrumentality.
26. The system of claim 24, wherein the first and second processors are different processors.	As established above, the Media Monitors Service infringes Claim 24, and, on information and belief, in some iterations, the first and second processors are different same processor. Further discovery will be needed to chart the infringing instrumentality.
27. A system for determining whether a query signal matches a reference signal, comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a system for determining whether an unknown commercial ("query signal") matches a known commercial ("reference signal"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad**

	Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web

	interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
a first processor configured to create a first version abstract of a first version of a reference signal input to said first processor;	The Media Monitors Service uses audio recognition algorithm software (it is obvious to one skilled in the art that software must be run on a processor, "a first processor") that generates fingerprints ("creates a first version abstract") from the known content ("each reference signal") input to it. **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added) "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the

	United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
a reference database storing said first version abstract;	The Media Monitors Service uses a database ("a reference database") for storing the reference fingerprints ("first version abstract[s]"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added) The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).

a device configured to determine whether said first version of said reference signal matches a query signal, by comparing a query signal abstract of said query signal to said first version abstract stored in said reference database.	The Media Monitors Service includes a device ("a comparing device") that compares the fingerprint created from an unknown commercial ("query signal abstract") to the fingerprint of the known commercial ("said first version of said reference signal") to determine if there is a match. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).

	How are new advertisements identified? **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added)
28. A system for determining whether a query signal matches a reference signal, comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a system for determining whether an unknown commercial ("query signal") matches a known commercial ("reference signal"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio

	RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries. RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
a first processor configured to create a first version abstract of a first version of a reference signal input to said first processor, wherein said first processor is configured to create said first version abstract from said first version of said reference signal based upon perceptual characteristics of said first version of said reference signal, such that said first version abstract retains a perceptual relationship to said first version of said reference	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "a first processor") that generates a fingerprint ("first version abstract") of the known commercial based, on information and belief, upon perceptual characteristics of said first version of said reference signal, such that said first version abstract retains a perceptual relationship to said first version of said reference signal. Further discovery is needed to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. …

signal;	**How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added) "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
a reference database storing said first version abstract;	The Media Monitors Service uses a database ("a reference database") for storing the reference fingerprint ("first version abstract"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database**

	where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added) The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a second processor configured to create a query signal abstract from a query signal, wherein said second processor is configured to generate said query signal abstract from said query signal based upon perceptual characteristics of said query signal, such that said query signal abstract retains a perceptual relationship to said query signal; and	The Media Monitors Service uses audio fingerprinting software (it is obvious to one skilled in the art that software must be run on a processor, "a second processor") which takes an unknown commercial spot ("query signal") that is detected by the local monitoring sites and creates a fingerprint ("creates an abstract") based, on information and belief, upon perceptual characteristics of the query signal, such that the query signal abstract retains a perceptual relationship to the query signal. Further discovery will be needed to chart the infringing instrumentality, but the following indicates infringement: **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface.

	See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added) "**In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
a device configured to determine whether a query signal matches said first version of said reference signal, by comparing, [*sic*] a query signal abstract that was generated based upon perceptual characteristics of said query signal, with said first version abstract stored in said reference database.	The Media Monitors Service includes a device ("a comparing device") that compares the fingerprint created from an unknown commercial ("query signal abstract"), generated based upon perceptual characteristics of said query signal, to the reference fingerprints previously stored in the reference database ("first version abstract stored in said reference database") to determine if they match. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).

	RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added) .
29. A system for determining whether a query signal matches any of a plurality of reference signal [*sic*], comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a system for determining whether an unknown commercial ("query signal") matches any of a set of known commercials ("any of a plurality of reference signal[s]"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa.

	Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added) .
a first processor configured to create a plurality of reference signal abstracts for each one of a plurality of reference signals, wherein each one of said plurality	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "a first processor") that generates fingerprints ("reference signal abstract[s]") from the known commercials. On information and belief, each one of said plurality of reference signal abstracts comprises signal characteristic parameters configured to differentiate between other versions of that one of said plurality of reference signals. Further discovery is needed to chart the infringing instrumentality, but the following

of reference signal abstracts comprises signal characteristic parameters configured to differentiate between other versions of that one of said plurality of reference signals;	indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added) "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx

	(emphasis added).
a reference database storing said plurality of reference signal abstracts;	The Media Monitors Service uses a database ("a reference database") for storing the reference fingerprints ("plurality of reference signal abstracts"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added) The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a device configured to determine if a query signal matches any one plurality of reference signals by comparing a query signal abstract of said query signal with at least one abstract of said plurality of	The Media Monitors Service includes a device ("a comparing device") that compares a fingerprint created from an unknown commercial ("query signal abstract") to the fingerprints of the known commercials ("plurality of reference signal abstracts stored in said reference database") to determine if they match. The **online advertising data collection & processing** follows four steps, listed below:

reference signal abstracts stored in said reference database.	Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online

	database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).

Blue Spike – Monitoring and Analyzing Signals – U.S. Patent 7,660,700

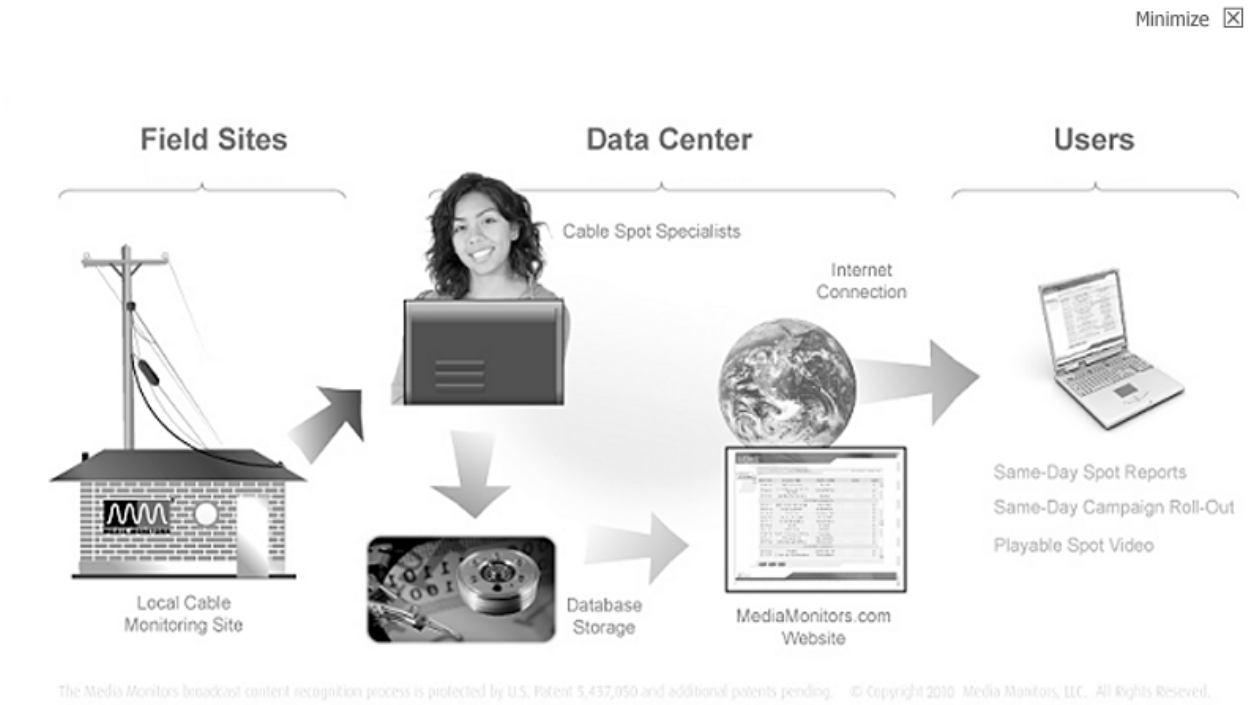
Preliminary Infringement Claim Chart

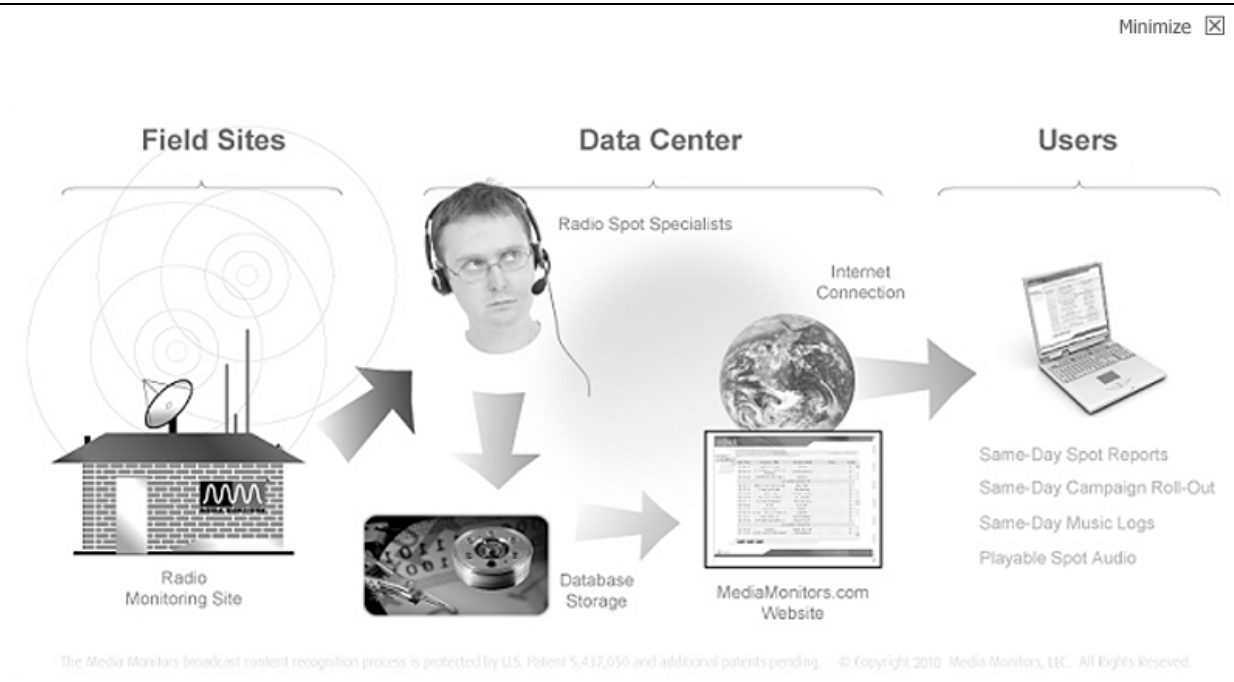
Claim	**Clear Channel Broadcasting's Media Monitors and RCS monitoring and verification software, systems, and technology**
1. An electronic system for monitoring and analyzing at least one signal comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a computer-based system ("electronic system") for monitoring and identifying ("monitoring and analyzing") commercial spot content and other media ("at least one signal"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology,

	developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
a first input that receives at least one reference signal to be monitored;	The Media Monitors Service uses an input (a "first input") to ingest commercial spots ("at least one reference signal") to be monitored. How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.** … **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web

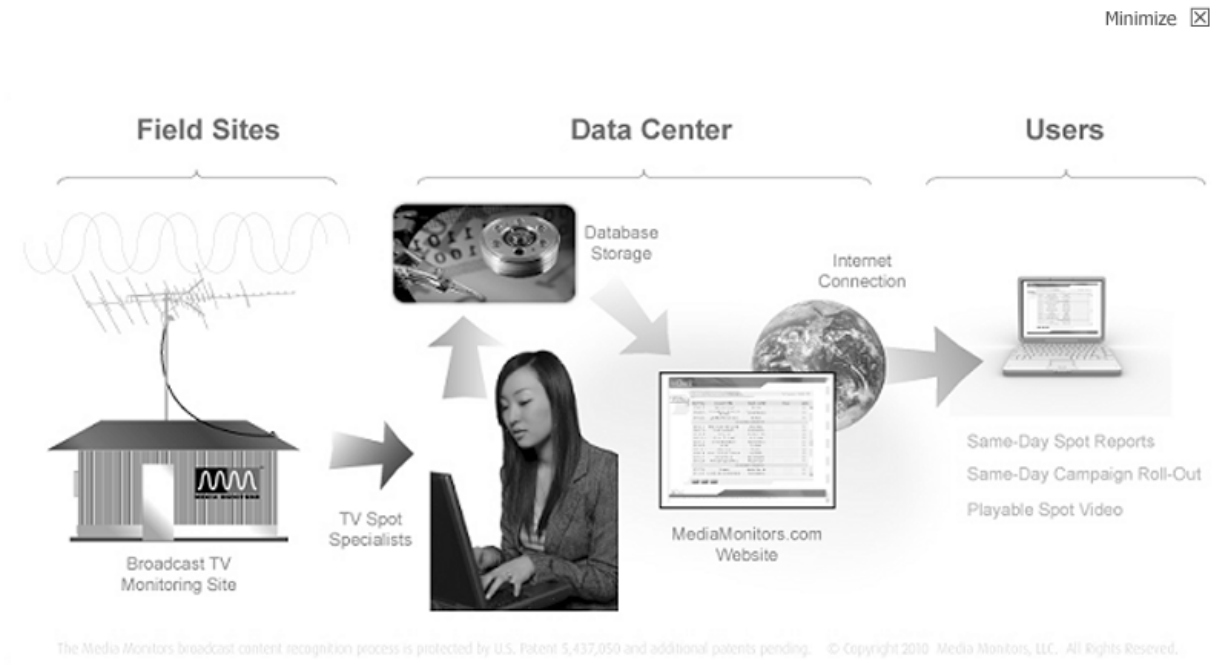
	interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: **A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date.** Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements**. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a first processor that creates an abstract of each reference signal input to said first processor through said first input wherein the abstract comprises signal characteristic parameters configured to differentiate between a plurality of versions of the reference signal;	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, "a processor") that generates a fingerprint ("creates an abstract") from the content ("reference signal") input to it. On information and belief, the abstract comprises signal characteristic parameters configured to differentiate between a plurality of versions of the reference signal. Further discovery is needed to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our

	patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
a second input that receives at least one query signal to be analyzed,	The Media Monitors Service uses its local monitoring sites ("a second input") to ingest commercials ("at least one query signal") to be identified ("analyzed"). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets.** Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).

	"**In most major markets, we capture radio, broadcast TV, and local cable advertising** occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).  *See* Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



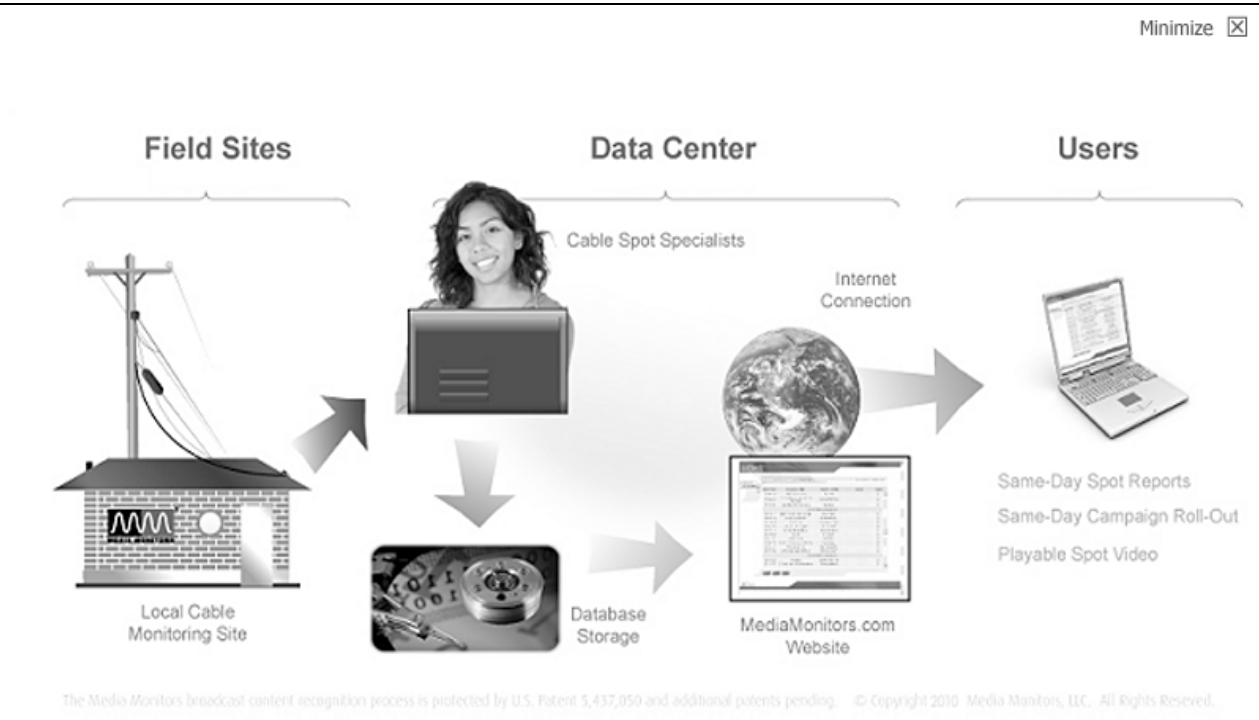
See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
a second processor that creates an abstract of each query signal wherein the abstract comprises signal characteristic parameters of the query signal;	The Media Monitors Service uses a fingerprinting algorithm or software (it is obvious to one skilled in the art that software must be run on a processor, on information and belief, "a second processor") that takes the unknown commercial ("query signal") and generates a fingerprint ("creates an abstract") from it. On information and belief, the abstract comprises signal characteristic parameters of the query signal. Further discovery is needed to chart the infringing instrumentality, but the following indicates infringement: **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research

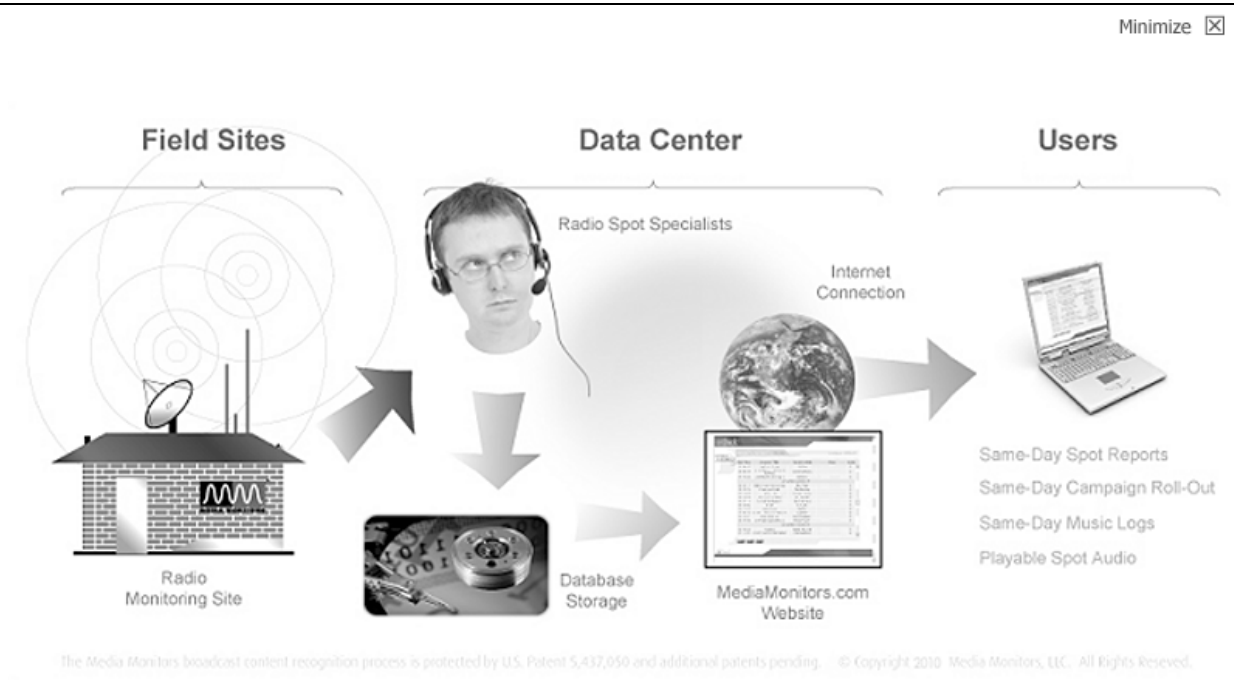
	and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification.**" *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
a reference database that stores abstracts of each at least one reference signal;	The Media Monitors Service uses a database ("a reference database") for storing fingerprints of the known commercial content ("abstracts of each at least one reference signal"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display**

	advertising content and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a comparing device that compares an abstract of said at least one query signal to the abstracts stored in the reference database to determine if the abstract of said at least one query signal matches any of the stored abstracts wherein a match indicates the query signal is a version of at least one of the reference signals.	The Media Monitors Service includes a device that compares the fingerprint of the unknown commercial ("abstract of said at least one query signal") to the fingerprints in the reference database ("abstracts stored in the reference database") to determine if there is a match. A match indicates that the query signal is a version of at least one of the reference signals. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of

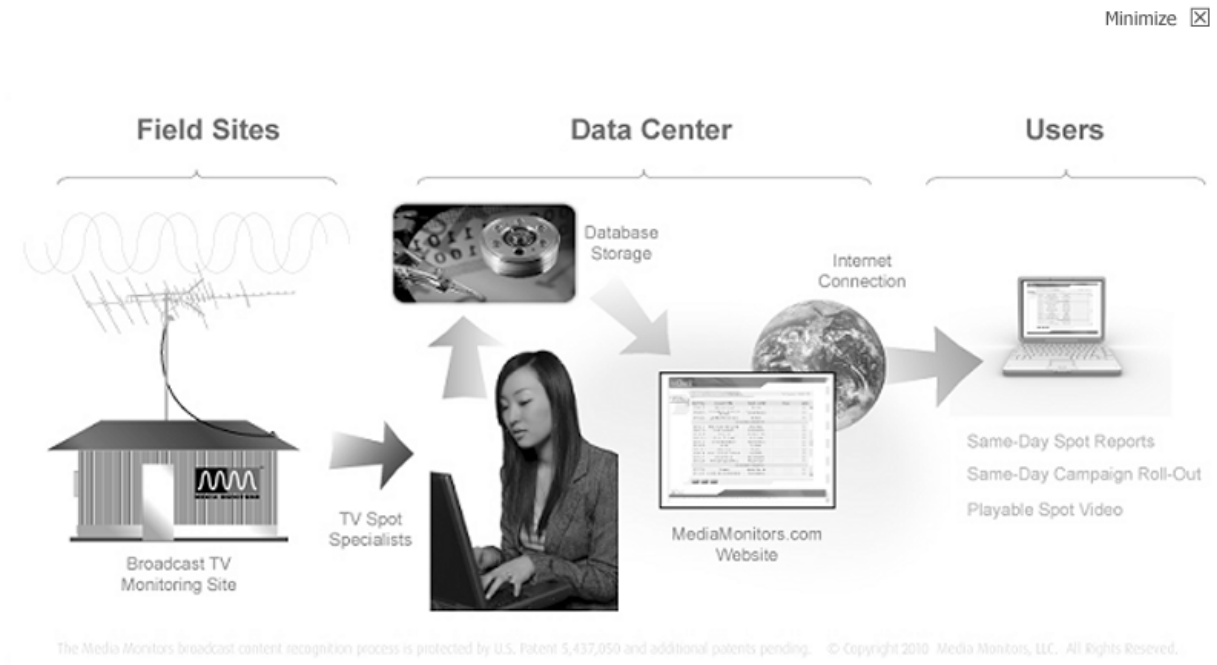
	each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
2. The system of claim 1, wherein said second input is remotely coupled to the system.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, each monitoring station or field site—*i.e.*, input for receiving the query signals (the "second input")—is remotely coupled to the main system. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets.** Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising** occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).



See Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
3. The system of claim 1, wherein said second processor is remotely coupled to the system.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, the second processor that creates the query signal abstracts (the "second processor") is remotely coupled to the main system. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification**." *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **How are new advertisements identified?**

	Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
4. The system of claim 1, wherein the system transmits the parameters that are being used by the first processor to the second processor.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, transmits the parameters that are being used by the first processor to the second processor so that the same parameters are used for the creation of both the reference signal abstracts and the query signal abstracts. Further discovery will be needed to chart the infringing instrumentality.
5. The system of claim 1, wherein the stored abstracts comprise a self-similar representation of at least one reference signal.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, the abstracts stored by the system are a self-similar representation of at least one reference signal. Further discovery will be needed to chart the infringing instrumentality.
6. The system of claim 1, wherein at least two of the stored abstracts comprise information corresponding to two versions of at least one reference signal.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, stores abstracts comprising information corresponding to two versions of at least one reference signal. Further discovery will be needed to chart the infringing instrumentality.
7. The system of claim 1, wherein the stored abstracts comprise data describing a portion of the characteristics of its associated reference signal.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, an abstract stored by the system comprises data describing a portion of the characteristics of its associated reference signal. Further discovery will be needed to chart the infringing instrumentality.
8. The system of claim 7, wherein the characteristics of	As established above, the Media Monitors Service infringes Claim 7, and, on information and belief, the characteristics of the reference signal being described comprise at least one of a perceptible characteristic, a cognitive characteristic, a

the reference signal being described comprise at least one of a perceptible characteristic, a cognitive characteristic, a subjective characteristic, a perceptual quality, a recognizable characteristic or combinations thereof.	subjective characteristic, a perceptual quality, a recognizable characteristic or combinations thereof. Further discovery will be required to chart the infringing instrumentality.
9. The system of claim 1, wherein each stored abstract comprises data unique to each variation of its corresponding reference signal.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, an abstract stored by the system comprises data unique to each variation of its corresponding reference signal. Further discovery will be needed to chart the infringing instrumentality.
10. The system of claim 1, wherein the system applies a cryptographic protocol to the abstract of said reference signal, said query signal, or both said reference signal and said query signal.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, applies a cryptographic protocol to the reference signal abstracts and/or query signal abstracts. Further discovery will be needed to chart the infringing instrumentality.
11. The system of claim 10, wherein the cryptographic protocol is one of at least a hash or digital signature and further comprising storing the hashed abstract and/or digitally signed abstract.	As established above, the Media Monitors Service infringes Claim 10, and, on information and belief, applies a cryptographic protocol that is either a hash or a digital signature and then stores the hashed abstract and/or digitally signed abstract. Further discovery will be needed to chart the infringing instrumentality.
12. The system of claim 1, further comprising an embedder to embed uniquely identifiable data into at least	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, includes an embedder to embed uniquely identifiable data into the received reference signal and/or the received query signal. Further discovery will be needed to chart the infringing instrumentality.

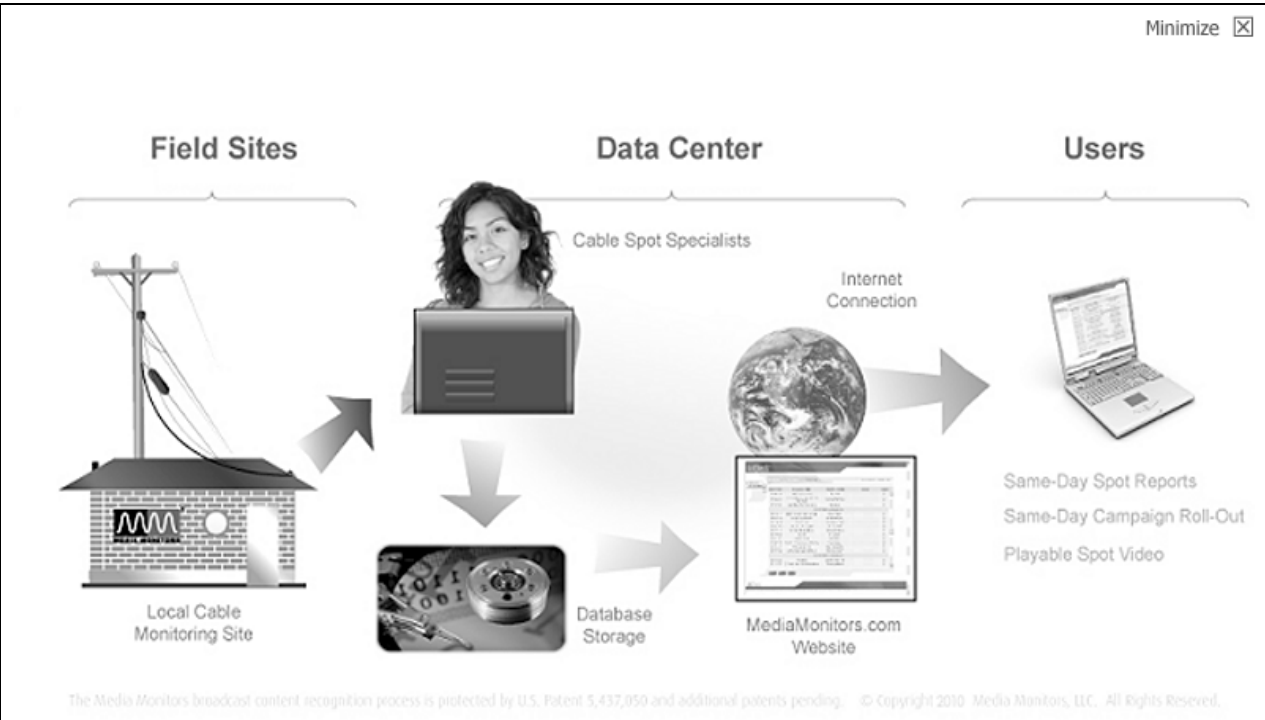
one of the received reference signal, the received query signal or both the received reference signal and the received query signal.	
13. The system of claim 1, wherein the match indicates that the abstract of the query signal comprises the same perceptual characteristics as the abstract of the matched one of the reference signals.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, a match on the system indicates that the query signal abstract comprises the same perceptual characteristics as the abstract of the matched reference signal. Further discovery will be needed to chart the infringing instrumentality.
14. The system of claim 1, wherein the parameters comprise commonly perceptible features.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, the signal characteristic parameters used by the system to generate abstracts are commonly perceptible features (*e.g.*, audio-based). Further discovery will be needed to chart the infringing instrumentality.
15. The system of claim 1, wherein the commonly perceptible features are selected.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, the signal characteristic parameters selected by the system to generate abstracts are commonly perceptible features (*e.g.*, audio-based). Further discovery will be needed to chart the infringing instrumentality.
16. The system of claim 1, wherein said first and said second processors are the same processor.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, the first and second processors used by the system are, in some iterations, the same processor. Further discovery will be needed to chart the infringing instrumentality.
17. The system of claim 1, wherein the first processor and the second processor are different processors.	As established above, the Media Monitors Service infringes Claim 1, and, on information and belief, the first and second processors used are, in some iterations, different processors. Further discovery will be needed to chart the infringing instrumentality.

18. A method for monitoring the distribution of data signals, comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a method for monitoring and identifying ("monitoring") the distribution of commercial spot content ("data signals"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries.** RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?**

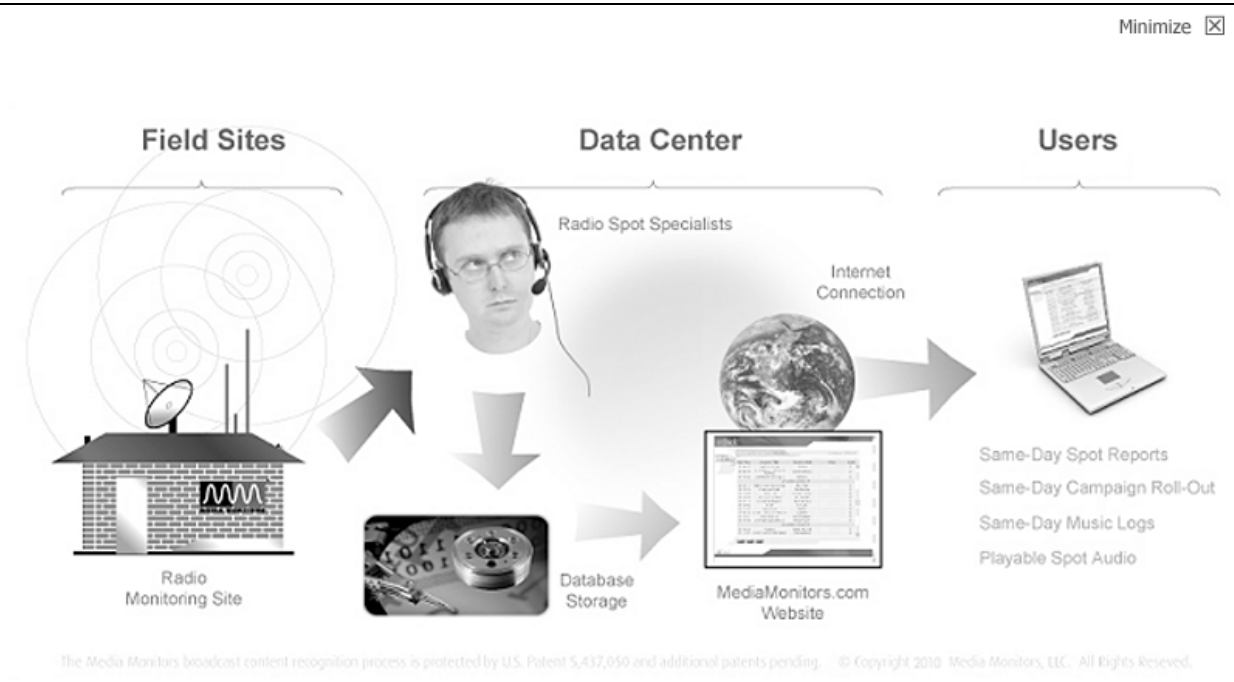
	Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
creating an abstract for a data signal wherein the data signal abstract comprises signal characteristic parameters configured to differentiate between a plurality of versions of the data signal;	The Media Monitors Service generates a fingerprint ("creates an abstract") from a commercial spot ("data signal"). On information and belief, the abstract comprises signal characteristic parameters configured to differentiate between a plurality of versions of the reference signal. Further discovery is needed to chart the infringing instrumentality, but the following indicates infringement: **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds

	of new advertisers and commercials every day. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
storing the data signal abstract in at least one reference database;	The Media Monitors Service uses a database ("at least one reference database") to store the fingerprint ("data signal abstract"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.**

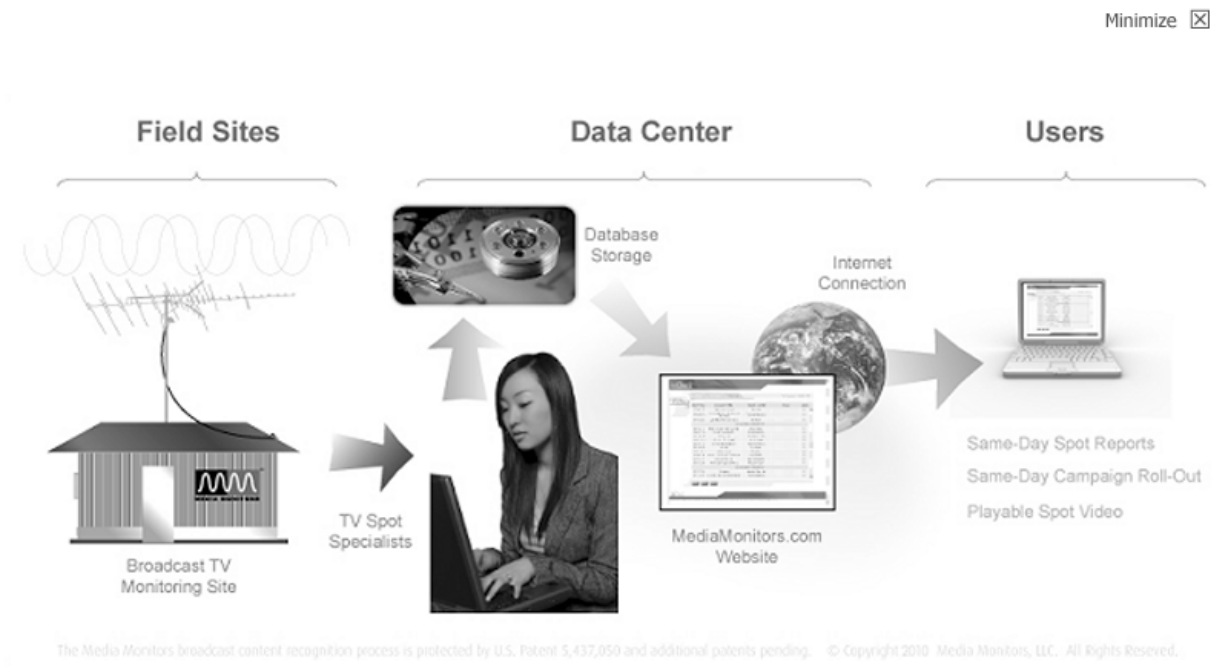
	Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
receiving a query signal,	The Media Monitors Service receives unknown commercials ("query signal[s]"). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets.** Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. … How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computer automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.** *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).



See Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
creating an abstract for the query signal based on the parameters;	The Media Monitors Service generates a fingerprint ("creat[es] an abstract") of the unknown commercial ("query signal") based, on information and belief, on the same parameters used to create the reference signal abstract. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where

	users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
comparing the created query signal abstract to the at least one database of data signal abstracts, each abstract in the at least one database corresponding to a version of the data signal; and	The Media Monitors Service compares the fingerprint created from the unknown commercial ("query signal abstract[s]") to the fingerprints in the reference database ("data signal abstracts") to determine if there is a match. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: **The previous day's newly observed data for known creative is available in Media Monitors the following day**. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).

determining whether the query signal abstract matches any of the stored data signal abstracts in the at least one database to enable authorized transmission or use of the query signal for the query signal abstract based on whether a match was determined.	If there is a match, the Media Monitors Service then forwards ("transmi[ts]") the spots and program content that it identifies ("query signals") to the company's Data Centers where they are used ("used") to compile competitive intelligence. **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers.** Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: **The previous day's newly observed data for known creative is available in Media Monitors the following day**. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information** for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of

	each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data**. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added).
19. The method of claim 18, wherein the database is created by at least one of a music company, a movie studio, an image archive, an owner of a general computing device, a user of the data signal, an internet service provider, an information technology company, a body politic, a telecommunications company and combinations thereof.	As established above, the Media Monitors Service infringes Claim 18, and Media Monitors, an "information technology company" creates the database of Claim 18. **MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad TrackingSM, Broadcast TV and Local Cable TV and provides sales and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top-rated advertising media in major markets. It's our combination of expert human attention coupled with **highly-sophisticated computer software** that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify**

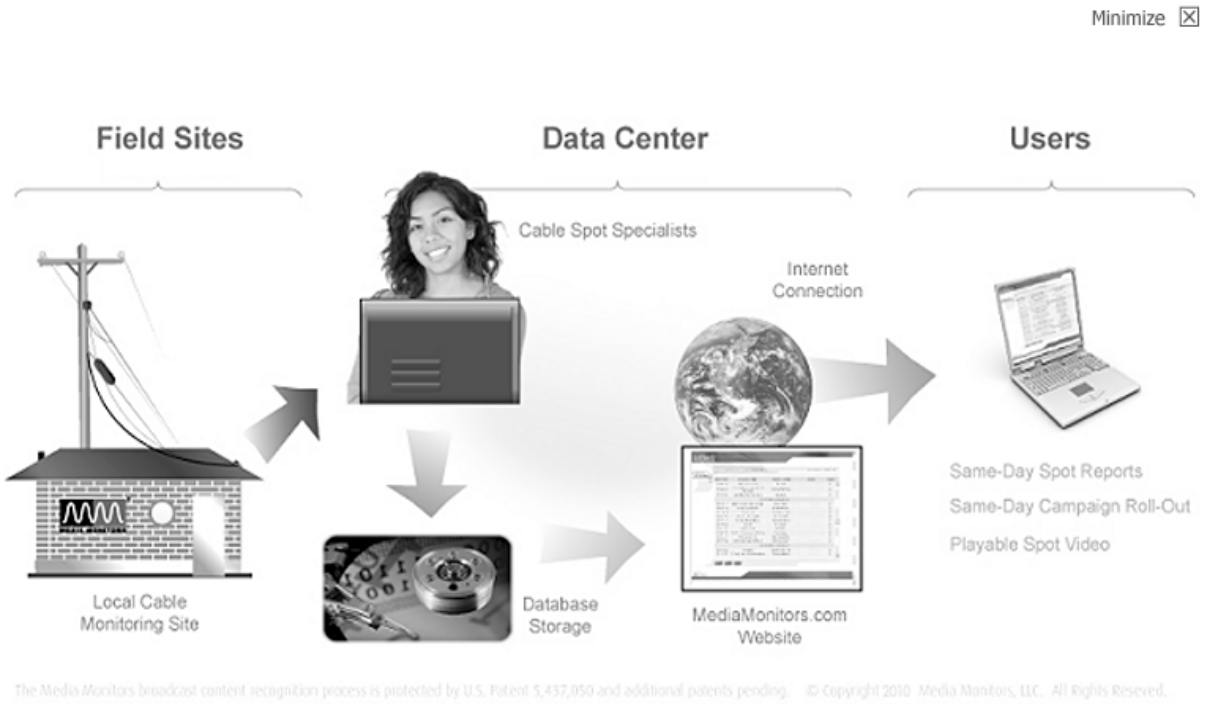
	new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
20. The method of claim 18, wherein the data signals comprise at least one of images, audio, video, and combinations thereof.	As established above, the Media Monitors Service infringes Claim 18, and the commercials ("data signals") are from both radio ("audio") and TV ("video"). **MM at a glance** Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, **Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. Every day, Media Monitors matches audio to fingerprints of millions of **radio**, **TV** and cable commercials, and scans hundreds

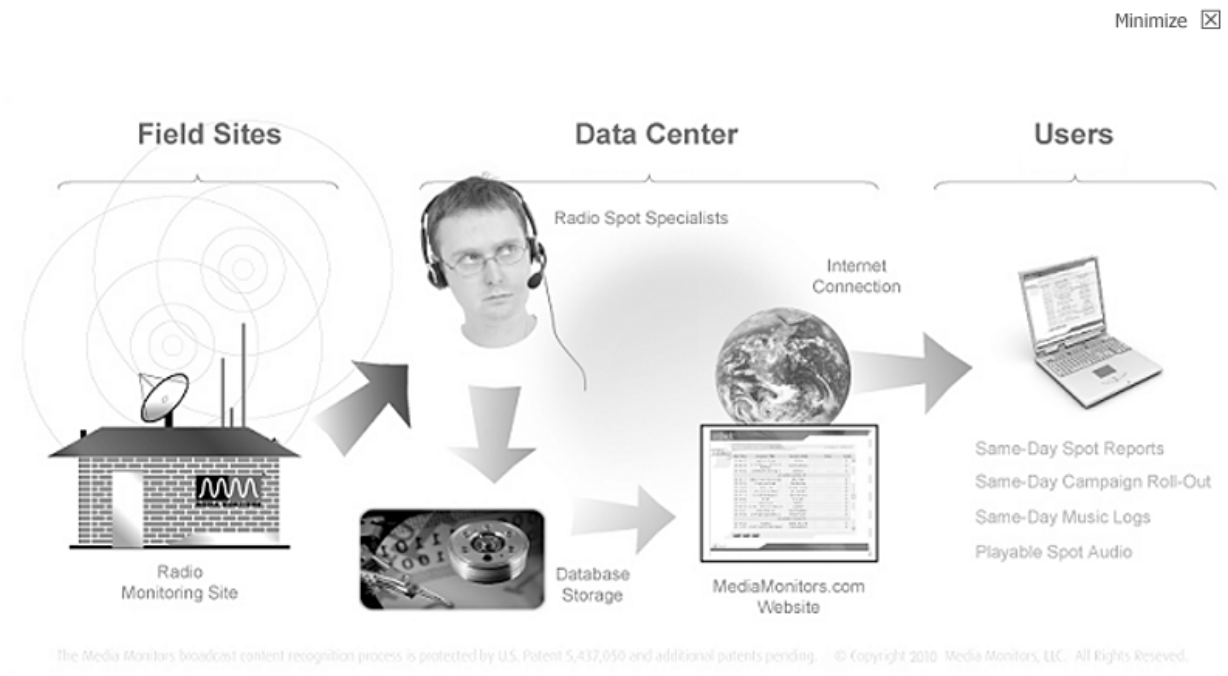
	of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors. *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added).
21. The method of claim 18, wherein the stored data signal abstracts are derived from one of a cognitive feature or a perceptible characteristic of the associated data signals.	As established above, the Media Monitors Service infringes Claim 18, and, on information and belief, the stored abstracts are derived from one of a cognitive feature or a perceptible characteristic of the associated data signals. Further discovery will be needed to chart the infringing instrumentality.
22. The method of claim 18, furthering comprising applying a cryptographic protocol to at least one created signal abstract, at least one database signal abstract or both at least one created signal abstract and at least one database signal abstract.	As established above, the Media Monitors Service infringes Claim 18, and, on information and belief, applies a cryptographic protocol to the reference signal abstracts and/or query signal abstracts. Further discovery will be needed to chart the infringing instrumentality.
23. The method of claim 22, wherein the cryptographic protocol comprises one of a hash or digital signature.	As established above, the Media Monitors Service infringes Claim 18, and, on information and belief, applies a cryptographic protocol that is either a hash or a digital signature. Further discovery will be needed to chart the infringing instrumentality.
24. The method of claim 18, wherein the stored signal abstracts comprise data to differentiate versions of the corresponding data signals.	As established above, the Media Monitors Service infringes Claim 18, and, on information and belief, the signal abstracts stored by the system comprise data to differentiate versions of the corresponding data signals. Further discovery will be needed to chart the infringing instrumentality.

25. The method of claim 18, wherein each of the stored data signal abstracts comprise information configured to differentiate variations of each referenced corresponding data signal.	As established above, the Media Monitors Service infringes Claim 18, and, on information and belief, each of the data signal abstracts stored by the system comprise information configured to differentiate variations of each referenced corresponding data signal. Further discovery will be needed to chart the infringing instrumentality.
26. The method of claim 18, further comprising storing information associated with the comparison step to enable at least one of a re-calibration of the database, a heuristic-based adjustment of the database, a computational efficiency adjustment of the database, an adjustment for database collisions and/or null cases, changes to the recognition or use parameters governing the database and combinations thereof.	As established above, the Media Monitors Service infringes Claim 18, and, on information and belief, stores information associated with the comparison step to enable at least one of a re-calibration of the database, a heuristic-based adjustment of the database, a computational efficiency adjustment of the database, an adjustment for database collisions and/or null cases, changes to the recognition or use parameters governing the database and combinations thereof. Further discovery will be needed to chart the infringing instrumentality.
27. The method of claim 18, further comprising applying one of a relatedness index or measure of similarity to generate uniquely identifiable information to determine authorization.	As established above, the Media Monitors Service infringes Claim 18, and, on information and belief, applies either a relatedness index or measure of similarity to generate uniquely identifiable information to determine authorization. Further discovery will be needed to chart the infringing instrumentality.
28. The method of claim 18, further comprising encoding	As established above, the Media Monitors Service infringes Claim 18, and, on information and belief, encodes information into the data signal with a watermarking technique. Further discovery will be needed to chart the infringing

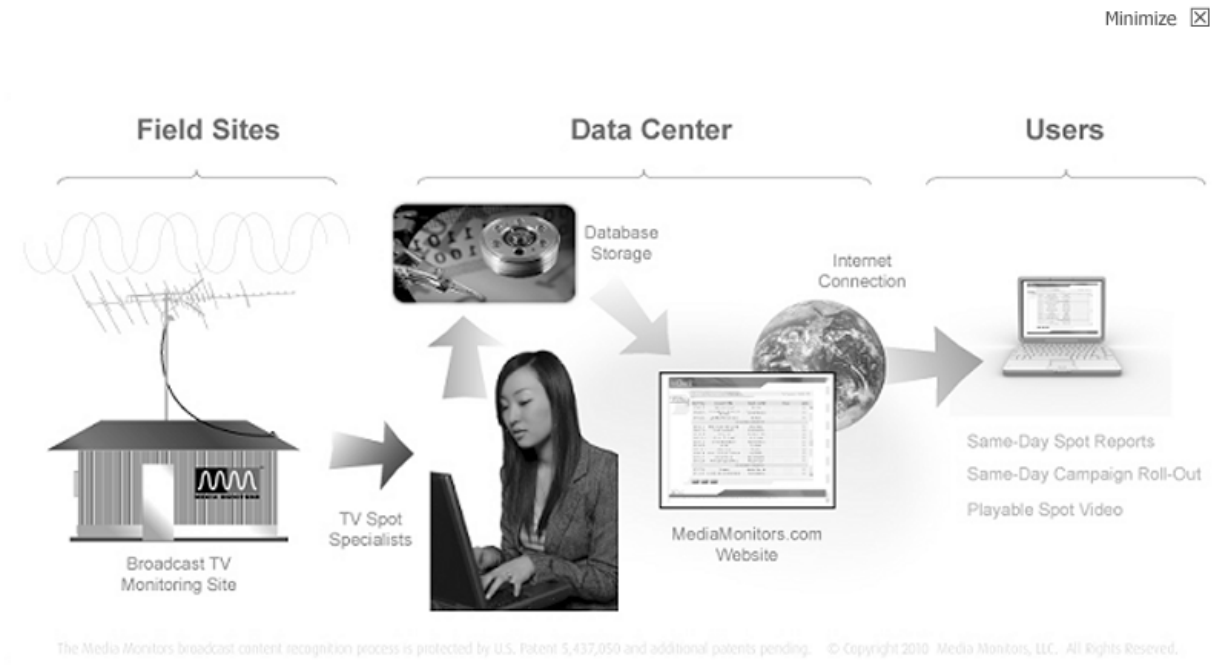
information into the data signal with a watermarking technique.	instrumentality.
29. The process of claim 18, wherein the data signal is received by one of a creator or owner of said data signal.	As established above, the Media Monitors Service infringes Claim 18, and, on information and belief, the data signal is received by either the creator or owner of the data signal. Further discovery will be needed to chart the infringing instrumentality.
30. A system for identifying and distributing signals, comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a system for identifying and distributing commercial spot content ("signals"). **MM at a glance** **Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast monitoring technology reviews top rated advertising media in major markets.** It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa. Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.** *See* Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added). Moving Beyond Radio **RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000**

	radio stations in the United States, Canada and other countries. RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
a first input that receives a query abstract of a signal to identify;	The Media Monitors Service uses an input ("a first input") to receive a fingerprint ("abstract") of an unknown commercial ("signal") to identify. **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising** occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."

	See Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).  *See* Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
a database containing a plurality of signal abstracts, the plurality of signal abstracts each associated with a corresponding signal wherein each of the plurality of the signal abstracts retains a perceptual relationship with the corresponding signal;	The Media Monitors Service uses a database containing fingerprints of known commercial spots ("plurality of signal abstracts"), each associated with a particular spot and retaining a perceptual relationship to it. **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface.

	See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
a comparing device that compares the query abstract to the plurality of abstracts stored in the reference database to identify a matching signal abstract; and	The Media Monitors Service includes a device ("a comparing device") that compares the fingerprint created from the unknown commercial ("query abstract") to the fingerprints in the reference database ("plurality of abstracts stored in the reference database") to determine if there is a match. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The **software continually crawls each web property each day.** Step 2: A **proprietary program finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).

	"In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added). **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
a device for retrieving the signal corresponding to the matching signal abstract; and	On information and belief, the Media Monitors Service retrieves the signal corresponding to the matching signal abstract. Further discovery will be needed to chart the infringing instrumentality.
a device for conducting a transaction, the transaction selected from the group consisting of a download and a subscription.	On information and belief, the Media Monitors Service also includes a device for conducting either a download or a subscription. Further discovery will be needed to chart the infringing instrumentality.

31. The system of claim 30, wherein each signal abstract comprises a link to its corresponding signal.	As established above, the Media Monitors Service infringes Claim 30, and, on information and belief, the data signal is received by either the creator or owner of the data signal. Further discovery will be needed to chart the infringing instrumentality.
32. The system of claim 30, wherein the comparing device determines if the signal abstracts stored in the database are authorized.	As established above, the Media Monitors Service infringes Claim 30, and, on information and belief, the comparing device determines if the signal abstracts stored in the database are authorized. Further discovery will be needed to chart the infringing instrumentality.
33. The system of claim 30, wherein the comparing device determines if the link is an authorized link.	As established above, the Media Monitors Service infringes Claim 30, and, on information and belief, the comparing device determines if the link is an authorized link. Further discovery will be needed to chart the infringing instrumentality.
34. The system of claim 30, wherein the reference database is governed by heuristics or experience-based parameters.	As established above, the Media Monitors Service infringes Claim 30, and, on information and belief, the reference database is governed by heuristics or experience-based parameters. Further discovery will be needed to chart the infringing instrumentality.
35. The system of claim 30, wherein the plurality of abstracts stored in the reference database are derived from one of data reduced versions of said corresponding signals, compressed variations of said corresponding signals, bit-addressable relationships between said corresponding signals, and a least amount of data required to uniquely identify each corresponding signal, and combinations	As established above, the Media Monitors Service infringes Claim 30, and, on information and belief, the abstracts stored in the reference database are derived from one of data reduced versions of said corresponding signals, compressed variations of said corresponding signals, bit-addressable relationships between said corresponding signals, and a least amount of data required to uniquely identify each corresponding signal, and combinations thereof. Further discovery will be needed to chart the infringing instrumentality.

thereof.	
36. The system of claim 30, wherein the device for conducting transactions or the device for retrieving the signal is remotely coupled to the system.	As established above, the Media Monitors Service infringes Claim 30, and, on information and belief, either the device for conducting transactions or the device for retrieving the signal is remotely coupled to the system. Further discovery will be needed to chart the infringing instrumentality.
37. The system of claim 30, wherein the device for conducting transactions or the device for retrieving the signal is controlled by the database.	As established above, the Media Monitors Service infringes Claim 30, and, on information and belief, either the device for conducting transactions or the device for retrieving the signal is controlled by the database. Further discovery will be needed to chart the infringing instrumentality.
38. The system of claim 30, wherein the device for retrieving the signal and the device for conducting transactions comprise the same device.	As established above, the Media Monitors Service infringes Claim 30, and, on information and belief, the device for retrieving the signal and the device for conducting transactions comprise the same device. Further discovery will be needed to chart the infringing instrumentality.
39. The system of claim 30, further comprising an embedder to watermark signals with uniquely identifiable information.	As established above, the Media Monitors Service infringes Claim 30, and, on information and belief, further comprises an embedder to watermark signals with uniquely identifiable information. Further discovery will be needed to chart the infringing instrumentality.
40. A process for analyzing and identifying at least one signal, comprising:	Media Monitors' media monitoring service (the "Media Monitors Service") is a process for monitoring and identifying ("analyzing and identifying") commercial spot content ("at least one signal"). **MM at a glance** **Media Monitors is the leader in <u>radio spot monitoring</u> (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV** and provides sale and marketing tools for media research firms and advertising agencies. **Our patented broadcast <u>monitoring</u> technology <u>reviews</u>**

top rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa.

Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. **Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.**

See Exhibit 1, Media Monitors "Company Overview" webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added).

Moving Beyond Radio

RCS developed real time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries. RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen.

See Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).

How are new advertisements identified?

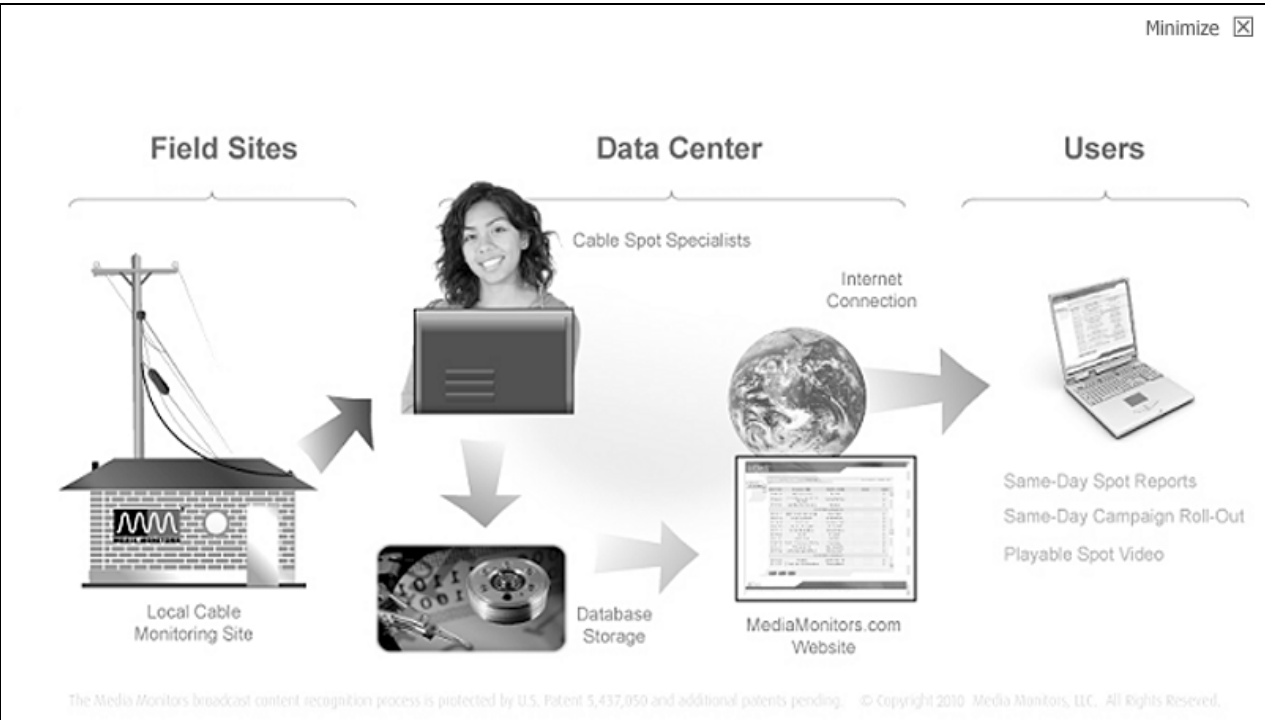
Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface.

	See Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).
receiving at least one reference signal to be identified,	The Media Monitors Service receives commercial spots ("at least one reference signal") to be identified. How does Media Monitors know what was played or what ran? **Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.** … **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: **A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date.** Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements**. Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.

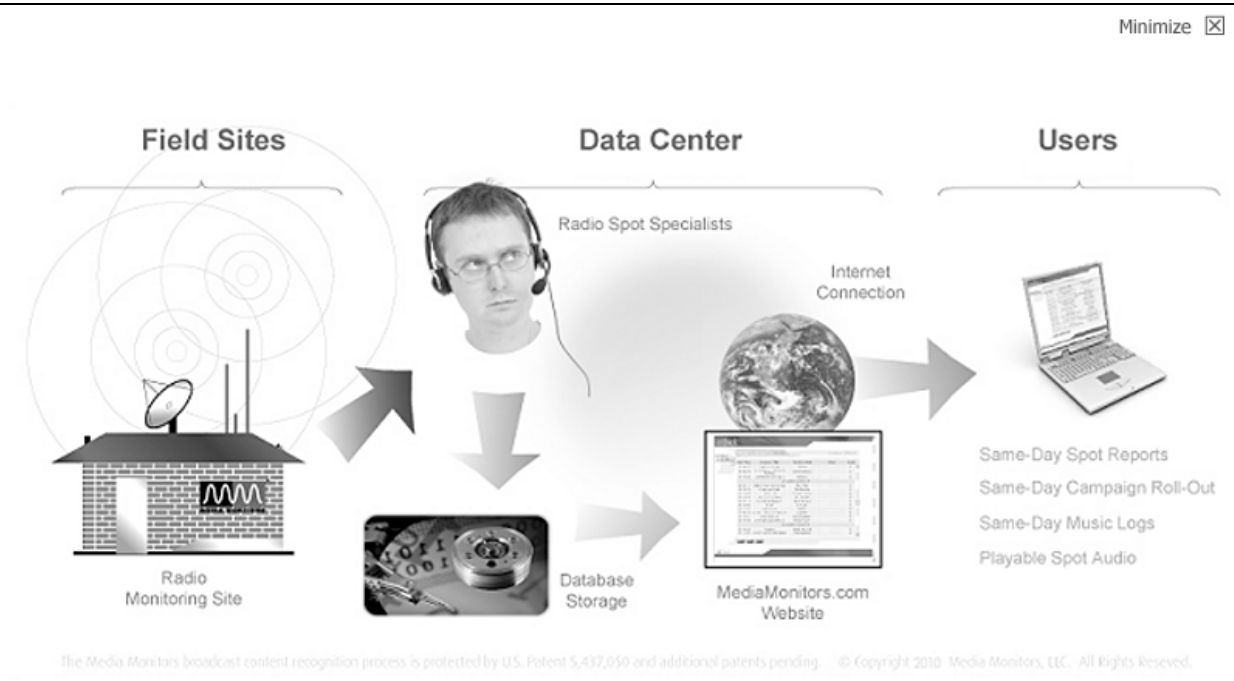
	See Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
creating an abstract of each reference signal received based on perceptual characteristics representative of parameters to differentiate between versions of the reference signal;	The Media Monitors Service generates a fingerprint ("creat[es] an abstract") from each commercial ("reference signal") based, on information and belief, on perceptual characteristics representative of parameters to differentiate between versions of the reference signal . Further discovery is needed to chart the infringing instrumentality, but the following indicates infringement: **How does Media Monitors know what was played or what ran?** Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of **fingerprinting technology** is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "In most major markets, **we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily** and also track major daily newspapers. **A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification."** *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added). **RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable.** Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase

	produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada. *See* Exhibit 2, parent-company RCS "About Us" webpage, http://www.rcsworks.com/en/company/about.aspx (emphasis added).
storing abstracts of each reference signal received in a database;	The Media Monitors Service uses a database to store the fingerprints ("abstracts of each reference signal"). **How are new advertisements identified?** Audio and video from top-rate broadcast stations is recorded using field sites in major markets. **Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are forwarded to our **Data Centers**, where teams of specialists research and **identify new advertisers. Play information is then added to the existing online database** where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program **finds display advertising from each website, downloads the creative files,** and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis** to match each creative observation to **our existing database library and identify new advertisements.** Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. **Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.** *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added).
receiving at least one query signal to be identified,	The Media Monitors Service uses its local monitoring sites to receive unknown commercials ("query signal[s]"). How does Media Monitors know what was played or what ran?

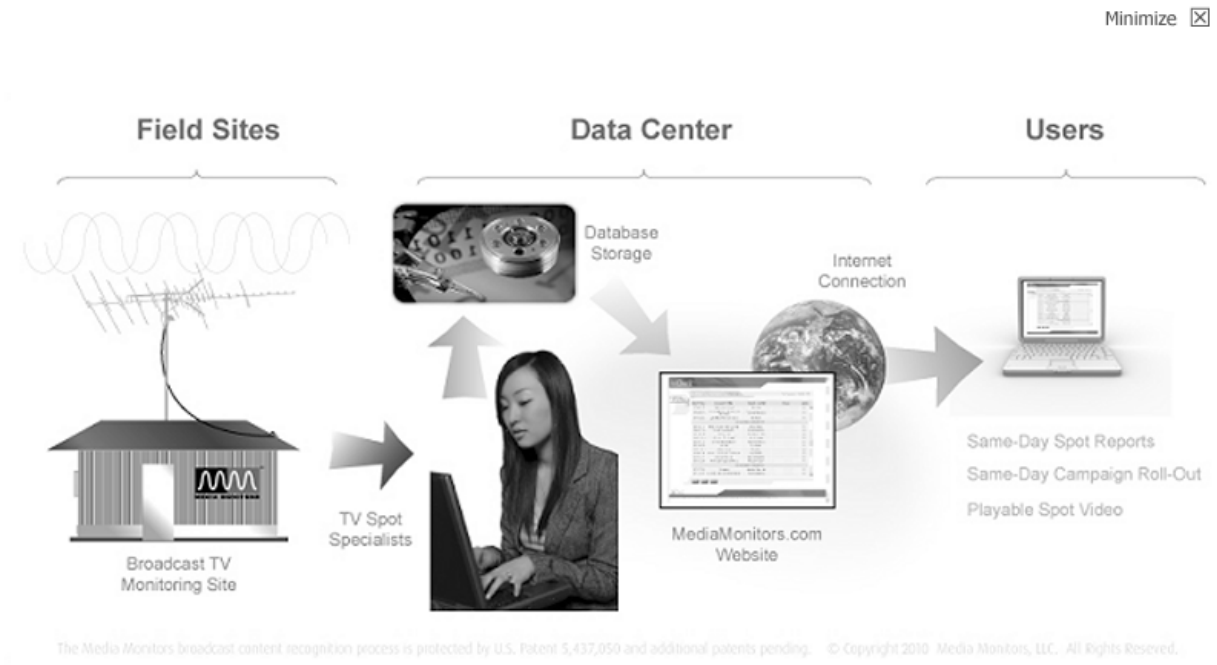
	Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computer automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. … **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets.** Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added).



See Exhibit 6, Media Monitors "Local Cable" webpage, http://mediamonitors.com/LocalCable.asp (emphasis added).



See Exhibit 7, Media Monitors "Radio" webpage, http://mediamonitors.com/Radio.asp (emphasis added).

	 *See* Exhibit 8, Media Monitors "Broadcast TV" webpage, http://mediamonitors.com/BroadcastTV.asp (emphasis added).
creating an abstract of the received query signal based on the parameters; and	The Media Monitors Service generates a fingerprint ("creat[es] an abstract") of the unknown commercial ("received query signal") based , on information and belief, on the parameters. Further discovery will be required to chart the infringing instrumentality, but the following indicates infringement: **How are new advertisements identified?** **Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output.** These are **forwarded to our Data Centers,** where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where

	users can easily search and access data, sort and examine it using a simple Web interface. *See* Exhibit 3, Media Monitors "FAQ" webpage, http://mediamonitors.com/faq.asp (emphasis added). "**In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification.**" *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).
comparing an abstract of said received query signal to the abstracts stored in the database to determine if the abstract of said received query signal is related to any of the stored abstracts.	The Media Monitors Service compares the fingerprint created from the unknown commercial ("abstract of said received query signal") to the fingerprints in the reference database ("abstracts stored in the database") to determine if there is a match—*i.e.*, whether it is related. The **online advertising data collection & processing** follows four steps, listed below: Step 1: The software continually crawls each web property each day. Step 2: A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date. Step 3: **Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.** Step 4: **The previous day's newly observed data for known creative is available in Media Monitors the following day**. Brand new creative is reviewed by our Discovery staff **to identify the display advertising content** and that data is typically available within 2-3 days. *See* Exhibit 4, Media Monitors "Local Internet" webpage, http://mediamonitors.com/Internet.asp (emphasis added). "In most major markets, we capture radio, broadcast TV, and local cable advertising occurrences 24 hours a daily and also track major daily newspapers**. A patented algorithm detects the fingerprint of every spot and creates a record of when and where it was aired for accurate verification.**" *See* Exhibit 5, Media Monitors "Demo" video, http://mediamonitors.com/Demo.asp (emphasis added).

<table>
<tr><td>41. The process of claim 40, wherein said database is independently accessible.</td><td>As established above, the Media Monitors Service infringes Claim 40, and, on information and belief, the database is independently accessible. Further discovery will be needed to chart the infringing instrumentality, but the following indicates infringement:

How are new advertisements identified?

Audio and video from top-rate broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface.

See Exhibit 3, Media Monitors “FAQ” webpage, http://mediamonitors.com/faq.asp (emphasis added).

MM at a glance

Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sale and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top rated advertising media in major markets. It’s our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India, and South Africa.

Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials, and scans hundreds of newspapers for ad data. All of this information is available on the easy-to-use website of Media Monitors.

See Exhibit 1, Media Monitors “Company Overview” webpage, http://mediamonitors.com/CompanyOverview.asp (emphasis added).</td></tr>
<tr><td>42. The process of claim 40, wherein said received query</td><td>As established above, the Media Monitors Service infringes Claim 40, and, on information and belief, stores the query signal independently. Further discovery will be needed to chart the infringing instrumentality.</td></tr>
</table>

signal is independently stored.	
43. The process of claim 40, wherein the criteria used to compare a received query signal abstract with a stored reference signal abstract are adjustable.	As established above, the Media Monitors Service infringes Claim 40, and, on information and belief, the criteria used to compare a received query signal abstract with a stored reference signal abstract are adjustable. Further discovery will be needed to chart the infringing instrumentality.
44. The process of claim 40, wherein the stored abstracts comprise a self-similar representation of at least one reference signal.	As established above, the Media Monitors Service infringes Claim 40, and, on information and belief, the stored abstracts comprise a self-similar representation of at least one reference signal. Further discovery will be needed to chart the infringing instrumentality.
45. The process of claim 40, wherein at least two of the stored abstracts comprise information corresponding to two versions of at least one reference signal.	As established above, the Media Monitors Service infringes Claim 40, and, on information and belief, at least two of the stored abstracts comprise information corresponding to two versions of at least one reference signal. Further discovery will be needed to chart the infringing instrumentality.
46. The process of claim 40, wherein at least one abstract comprises data describing a portion of the characteristics of its associated reference signal.	As established above, the Media Monitors Service infringes Claim 40, and, on information and belief, at least one abstract comprises data describing a portion of the characteristics of its associated reference signal. Further discovery will be needed to chart the infringing instrumentality.
47. The process of claim 46, wherein the characteristics of the reference signal being described comprise at least one of a perceptible characteristic, a cognitive characteristic, a subjective characteristic, a	As established above, the Media Monitors Service infringes Claim 46, and, on information and belief, the characteristics of the reference signal being described comprise at least one of a perceptible characteristic, a cognitive characteristic, a subjective characteristic, a perceptual quality, a recognizable characteristic or combinations thereof. Further discovery will be needed to chart the infringing instrumentality.

perceptual quality, a recognizable characteristic or combinations thereof.	
48. The process of claim 40, wherein a stored abstract comprises data unique to a variation of its corresponding reference signal.	As established above, the Media Monitors Service infringes Claim 40, and, on information and belief, a stored abstract comprises data unique to a variation of its corresponding reference signal. Further discovery will be needed to chart the infringing instrumentality.
49. The process of claim 40, wherein the process further comprises applying a cryptographic protocol to the abstract of said reference signal, said query signal, or both said reference signal and said query signal.	As established above, the Media Monitors Service infringes Claim 40, and, on information and belief, the process further comprises applying a cryptographic protocol to the abstract of said reference signal, said query signal, or both said reference signal and said query signal. Further discovery will be needed to chart the infringing instrumentality.
50. The process of claim 49, wherein the cryptographic protocol is one of at least a hash or digital signature and further comprising storing the hashed abstract and/or digitally signed abstract.	As established above, the Media Monitors Service infringes Claim 49, and, on information and belief, the cryptographic protocol is one of at least a hash or digital signature and further comprising storing the hashed abstract and/or digitally signed abstract. Further discovery will be needed to chart the infringing instrumentality.
51. The process of claim 40, further comprising distributing at least one signal based on the comparison step.	As established above, the Media Monitors Service infringes Claim 40, and, on information and belief, further comprises distributing at least one signal based on the comparison step. Further discovery will be needed to chart the infringing instrumentality.
52. The process of claim 51, further comprising watermarking the at least one	As established above, the Media Monitors Service infringes Claim 51, and, on information and belief, further comprises watermarking the at least one signal to be distributed. Further discovery will be needed to chart the infringing

signal to be distributed.	instrumentality.

Exhibit 1

MEDIA MONITORS
THE LEADER IN LOCAL MEDIA MONITORING

Sign in

HOME COMPANY SERVICES TRAINING CONTACT

Company Overview

MM Executives

- Philippe Generali, President
- Joseph McCallion, Executive VP
- Frank Cammarata, VP Sales
- Dwight Douglas, VP Marketing

MM at a glance

Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking℠, Broadcast TV and Local Cable TV and provides sales and marketing tools for media research firms and advertising agencies. Our patented broadcast monitoring technology reviews top-rated advertising media in major markets. It's our combination of expert human attention coupled with highly-sophisticated computer software that allows you to create same-day online reports anytime you want them, 24 hours a day. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa.

Using the patented technology of Media Monitors, Sales Executives can have details on a particular advertisement or an entire campaign at their fingertips in seconds. Every day, Media Monitors matches audio to fingerprints of millions of radio, TV and cable commercials and scans hundreds of newspapers for ad data. All this information is available on the easy-to-use web site of Media Monitors.

Media Monitors is a subsidiary of RCS. RCS is the world's leading provider of broadcast and Webcast software, serving over 9,000 radio stations, TV music channels, cable companies, satellite music networks and Internet stations worldwide. The Media Monitors broadcast content recognition process is protected by U.S. Patents 5,437,050 and 7,386,047 and additional patents pending.

Media Monitors
445 Hamilton Avenue, 7th floor
White Plains, NY 10601
1-800-67-MEDIA
Tel: (914) 428-5971
Fax: (914) 259-4541

Privacy Policy

Exhibit 2

About Us

RCS Executives

RCS World Headquarters

Philippe Generali, President/CEO
Chip Jellison, EVP, Technology & Development
Mark Hirschhorn, VP/CFO
Mike Powell, VP/International
Dwight Douglas, VP Marketing
Paul McKnight, VP/Client Services
Neal Perchuk, VP/Sales US

Regional Executives

Sven Andræ, VP/RCS Europe
Robin Prior, VP/RCS Africa

RCS Worldwide

Worldwide Offices

RCS World Headquarters

Neal Perchuk:
+1.914.428.4600

E-mail RCS World Headquarters

Company Overview

RCS is the world's leading provider of broadcast software, used by more than 9,000 radio and TV stations, cable music channels, satellite radio networks and Internet music sites worldwide. RCS has been the leader in software innovations since 1979.

From GSelector4, the world's most powerful multi-station scheduling system, to Zetta the award-winning digital radio automation system, to our integrated traffic software Aquira, RCS has a complete suite of software products for today's media outlet. RCS software solutions more advanced, extremely reliable, comfortably intuitive and expediently flexible and backed up by a world-class support team. RCS provides 24/7 support and assistance to all users in more than 100 countries.

RCS developed real-time audio recognition technology, which drives Media Monitors and Mediabase, our divisions that monitor commercial and musical content on radio, broadcast TV, and cable. Media Monitors provides competitive intelligence information for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. While Mediabase produces airplay charts for radio, satellite and music television channels and tracks the success of each song in over 1,900 stations in the United States and Canada.

Our global team of employees has a vast knowledge of every product and service produced at RCS. We believe in our customer's success. We have the best problem solving and solution minds in the broadcast software industry. When you need software, you'll want RCS.

For more information contact:
Dwight Douglas, +1.914.428.4600

E-mail RCS Newsroom

History Of The Company

Seeing the need for computerized song scheduling systems for radio stations, Andrew Economos left NBC to create Radio Computing Services, now known as RCS. Dr. Economos led the way by launching the first software to schedule music at radio stations throughout the world.

In 1979, RCS opened its doors with the first version of Selector® designed for music radio stations wanting to have more control over their song rotations, while maintaining balance and creating variety. Within the first year, Selector had its first station, the NBC owned FM station in San Francisco. Selector's rapid achievement pushed RCS to

Find:
- Radio Automation
- Music Scheduling
- New Media
- News Production
- Recording/Monitoring
- Contest/Promotion
- Traffic

develop more software for the broadcasting industry.

Building on Success
RCS saw the need for a sister program to help programmers and sales departments schedule promotional announcements and jingles, or "links" as coined by RCS, so Linker® was created. In 1983, the Compact Disc (CD) and the era of digital music were born. Within five years, RCS introduced another innovation, its first complete on-air digital studio automation system called Master Control™ which, along with Selector and Linker, completed the digital paperless studio for radio stations everywhere. By 1993, RCS counted over 2,000 stations worldwide using its software; three years later, Selector broke the 3,000 mark.

The best use the best™
RCS continues to improve all its software programs and delivers updated versions with new features several times a year. A hallmark of RCS from the beginning was the need to base refinements and improvements driven by its loyal customers and experienced 'power' users of the products. Innovative ideas like Internet Voice Tracking™ and RCS RadioShow™ keep RCS stations on the cutting edge. iSelector™, the award-winning patented interactive Internet is another example of RCS developing groundbreaking technologies for its customers and clients.

Moving Beyond Radio
RCS developed real-time audio recognition technology, which has been used in its launch of Media Monitors, a separate company that monitors commercial and musical content on 1,000 radio stations in the United States, Canada and other countries. RCS RadioShow technology, developed by RCS, is a platform to program and synchronize graphic content to broadcast audio and display the results on any device equipped with a screen.

RCS Today
RCS is the world's leading provider of broadcast software, used by more than 9,000 radio stations, TV music channels, cable companies, satellite radio networks and Internet stations worldwide. In January of 2007 RCS merged with Prophet Systems Innovations. Prophet Systems brings industry standard products like NexGen Digital to the RCS suite of solutions.

RCS Company

About Us
- RCS History

Contact Us
- Here for you day or night
- Find an office near you

Newsroom
- Press Releases
- Story Sources
- Contact Information

Worldwide
- Communicate in your preferred language

Employment
- Careers at RCS

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Exhibit 3

Frequenly Asked Questions

Media Monitors FAQ

What is the primary purpose for Media Monitors?

Media Monitors provides competitive intelligence for markets in the United States, Canada, United Kingdom, Australia, India and South Africa. Media Monitors is the leader in radio spot monitoring (MRC accredited), Newspaper Ad Tracking, Broadcast TV and Local Cable TV and provides sales and marketing tools for media research firms and advertising agencies.

What does it mean that Media Monitors radio service is accredited by MRC?

In the early 1960s, a US Congressional Committee held hearings on the purpose and accuracy of audience research and considered regulation related to the TV and Radio industries. These hearings resulted in the formation of an Industry-funded organization to review and accredit audience rating services called the MRC – Media Rating Council. The MRC counts 130 Board members in total, representing TV and Radio Broadcasting, Cable, Print, Internet and Advertising Agency organizations as well as Advertisers and Trade Associations. Major US Research organizations seek the MRC accreditation today and, if successful, the year-long stringent audit process brings remarkable credibility in the industry. Media Monitors has received MRC accreditation for its radio spot data.

How does Media Monitors know what was played or what ran?

Media Monitors' patented broadcast monitoring technology constantly records top-rated networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day.

How long does Media Monitors keep the audio or video?

90 days.

What markets do you monitor?

Too many to list here. Check out our Market Map.

How are new advertisements identified?

Audio and video from top-rated broadcast stations is recorded using field sites in major markets. Our patented method of fingerprinting technology is then used to identify spots, and program output. These are forwarded to our Data Centers, where teams of specialists research and identify new advertisers. Play information is then added to the existing online database where users can easily search and access data, sort and examine it using a simple Web interface.

How soon is new advertising data available?

Often same day availability is available.

How is the actual creative viewed?

Report results will display an Instance number that links to the flight data. The flight data includes day and time of airing, the program title the spot aired in (if applicable) and a Media icon that allows playback of the creative.

How are my report results organized?

Most reports offer a variety of sorting options so you can organize the data by Account, Parent, Category, Instances, or even Estimated Expenditure.

What are some of the different aspects of Media Monitors that can help media outlet, or agency?

With Media Monitors Expenditure Data, Cost-Per-Point statistics and accurate verification, we can be your one-stop shop for quality information. Give your sales staff the tools to maximize their share of every dollar spent from every media campaign. Access an estimate of each campaigns expenditure so you can chart your sales compared of your competitors.

Can I download any of the reports or data?

All reports are available in the results screen and may be exported to Excel for further review or printing.

Is there a way to look at more than one station at a time?

Yes, Audience Reaction Face-Off compares two media against each other at the same time.

What is Mscore and how does it work?

Using minute-by-minute data from Portable People Meters deployed in US markets, Media Monitors has created a groundbreaking index: Mscore, the result of a partnership between Media Monitors, Mediabase and Arbitron. By showing how much the radio audience changes stations while a given song is playing, Mscore creates this performance rating for each song. The results are displayed in an easy to read graph, based on week to week airplay and listeners' reaction.

Using a patent pending algorithm, the multi-week moving trend of switching activity determines the Mscore for every song. The value can be positive or negative; representing less or more switching.

Does Media Monitors track programming?

Media Monitors records all content in select market broadcasts and identifies 30 and 60 second commercials as well as the log of spots as aired.

What do I see from Media Monitors in newspapers?

You can see each ad the way it ran in the paper, even in color if that is the way it was published.

Does Media Monitors provide any support or training?

Of course. Media Monitors offers FREE one-on-one or small group training sessions for new or existing client companies. Regularly scheduled WebEx sessions may be viewed here. Contact Chad Pfeiffer at 1-800-67-MEDIA, ext. 4863 or E-mail Chad at training@mediamonitors.com. Capacitación en español disponible a petición. Contacte a Ruth Arias al 1-800-67-MEDIA O vía correo electrónico rarias@mediamonitors.com.

How do I get a free trial?

Contact sales and you will be up and running on a free trial.

How do I log in if I forgot my password?

1. Click the Forgot Password link from the Login window to open this pane.
2. Enter your Username.
3. We will email your password to the address you have on file.

Back To Top

Exhibit 4

MEDIA MONITORS
THE LEADER IN LOCAL MEDIA MONITORING

Sign in

Local Internet

Methodology for Internet Data in Media Monitors

Media Monitors tracks local online display advertising by placing our data collection equipment physically in the markets we monitor. By tracking online advertising on web properties specifically targeted to that market Media Monitors is accurately providing a view of in-market advertising.

Media Monitors has done the research to identify the locally targeted web properties in each market we monitor. Within each market, the number of web properties monitored varies from 150 to 400. The list of web properties for each market is regularly reviewed and updated and is available on request.

The online advertising data collection & processing follows four steps, listed below:

Step 1: The software continually crawls each web property each day.

Step 2: A proprietary program finds display advertising from each website, downloads the creative files, and captures specific data such as the URL, time, and date.

Step 3: Automated processes are run on a nightly basis to match each creative observation to our existing database library and identify new advertisements.

Step 4: The previous day's newly observed data for known creative is available in Media Monitors the following day. Brand new creative is reviewed by our Discovery staff to identify the display advertising content and that data is typically available within 2-3 days.

Click here for FAQ.

What our Local Internet service provides:

- Immediate access to creative all in one system
- Powerful cross media search tools
- One- click data export to Microsoft Excel

Exhibit 5

(Flash DEMO Video)

Exhibit 6

MEDIA MONITORS®
THE LEADER IN LOCAL MEDIA MONITORING™

Sign in

HOME COMPANY SERVICES TRAINING CONTACT

Local Cable

Media Monitors' patented broadcast monitoring technology constantly records top-rated Local Cable networks in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. Media Monitors Local Cable service provides occurrence information for the Local Cable networks we monitor.

Media Monitors offers Local Cable in more markets than any other monitoring service. In addition to monitoring the major Cable networks we also monitor Regional News and Regional Sports networks in most of our markets. Review any network's log of spots as aired, and watch the creative. Information can be tracked by Account, Parent, and Category. Make knowledgeable decisions with current information.

Click here for FAQ.

Click to Enlarge

Why you will profit from this powerful Local Cable tool:

- Identify prospects for new business
- Increase profitability from existing clients
- Improve accountability
- Track competitive advertising

What our Local Cable service provides:

- Same-day Local Cable data availability
- Immediate access to occurrence and creative all in one system
- Powerful online search tools for Local Cable in your market
- One-click data export to Microsoft Excel

Minimize ☒

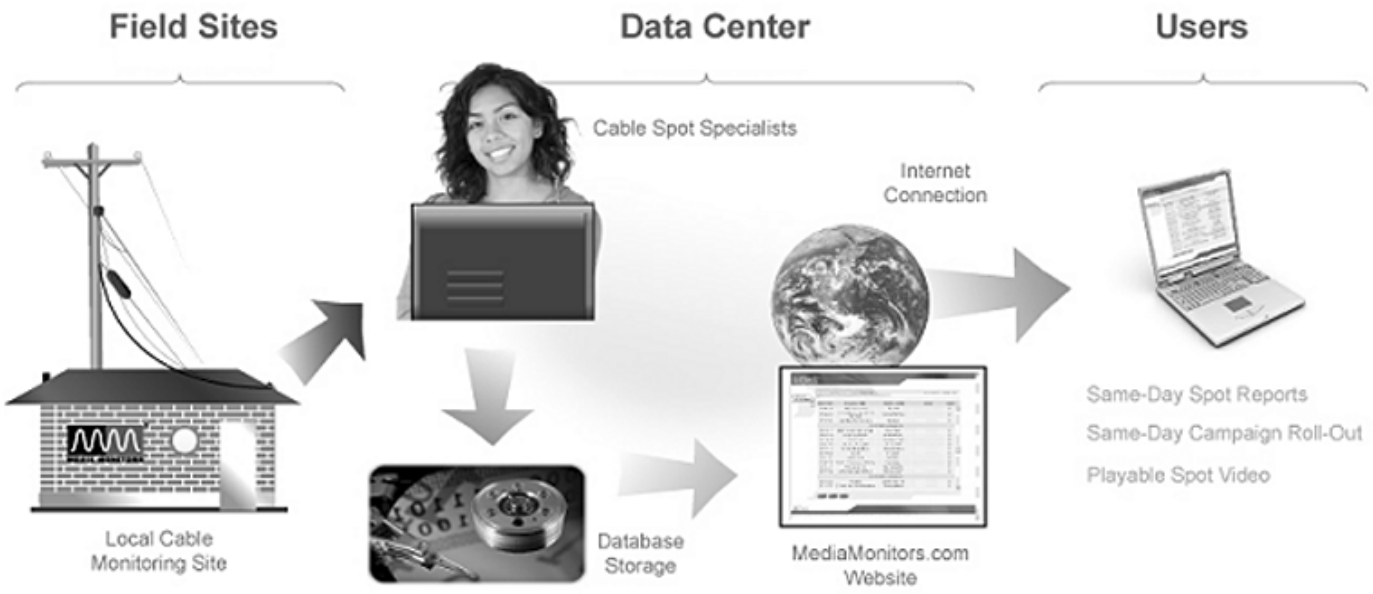

Exhibit 7

MEDIA MONITORS®
THE LEADER IN LOCAL MEDIA MONITORING™

Sign in

HOME COMPANY SERVICES TRAINING CONTACT

Local Radio

Media Monitors' patented radio monitoring technology listens to top-rated radio stations in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. Media Monitors Radio service provides occurrence and expenditure information with Audience Reaction® and AdRev.

You have access to detailed local radio occurrences in close to 40 different radio formats.

Hispanic Radio

Access 147 Hispanic Radio stations in more than 40 markets.

It is this combination of expert human attention coupled with highly-sophisticated computer hardware and software that allows you to create same-day online reports anytime you want them. Track advertising activity across radio stations in one or multiple markets. Information can be tracked by Account, Parent, and Category. Examine any radio station's log of spots as aired, and listen to the creative.

Radio En Español

Tenga acceso a 147 estaciones de Radio en Español en más de 40 mercados.

Click here for FAQ.

Click to Enlarge

Why you will profit from this powerful Radio tool:

- Great for prospecting; generate instant sales leads
- Advertising campaign verification
- Make powerful decisions with current information
- Create competitive intelligence reports

What our Radio service provides:

- Same-day Radio data availability
- Immediate access to occurrence and creative all in one system
- Powerful online search tools for Radio stations in your market
- One-click data export to Microsoft Excel
- Ability to generate reports whenever you want

Media Monitors Radio Spot Data is Accredited by the Media Rating Council

Accredited by Media Rating Council®

Minimize ☒

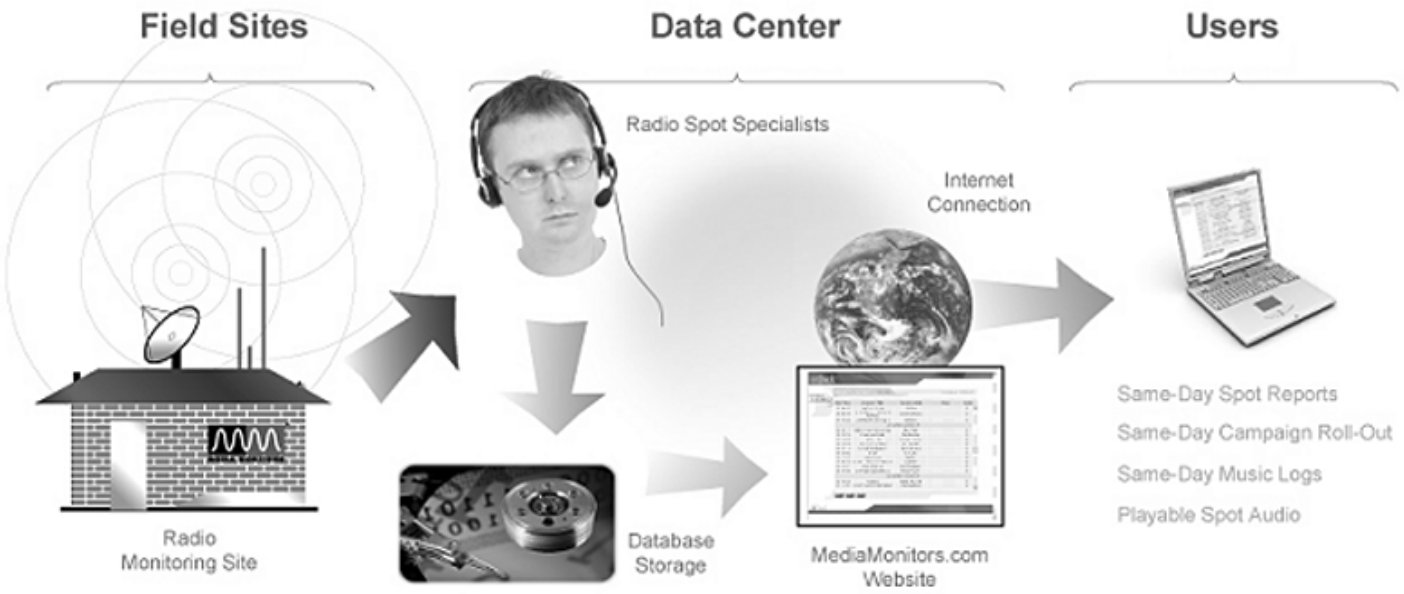

Exhibit 8

MEDIA MONITORS
THE LEADER IN LOCAL MEDIA MONITORING

Sign in

HOME COMPANY SERVICES TRAINING CONTACT

Local TV

Media Monitors' patented broadcast monitoring technology constantly records top-rated television stations in major markets across the country. Our computers automatically track millions of recurring commercials 24/7, 365 days a year. Our team of spot data specialists research and identify hundreds of new advertisers and commercials every day. Media Monitors Local TV service provides occurrence and expenditure information for the television stations we monitor.

Network TV

Media Monitors Network TV service provides occurrence information for the following broadcast networks:

ABC	My Network
CBS	NBC
CW	Telemundo
Fox	Univision

Track advertising activity across television stations in one or multiple markets. Information can be tracked by Account, Parent, and Category. Examine any log of spots as aired, and view as well as listen to the creative. Make knowledgeable decisions with current information.

Click here for FAQ.

Click to Enlarge

Why you will profit from this powerful TV tool:

- Identify prospects for new business
- Increase profitability from existing clients
- Improve accountability
- Track competitive advertising

What our TV service provides:

- Same-day TV data availability
- Immediate access to occurrence and creative all in one system
- Powerful online search tools for TV
- One-click data export to Microsoft Excel

Minimize ☒